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REPORT
No. 1

EIGHTH ANNUAL REPORT

OF THE

ACTIVITIES OF THE JOINT COMMITTEE ON DEFENSE PRODUCTION

WITH MATERIAL ON

MOBILIZATION

FROM DEPARTMENTS AND AGENCIES

JANUARY 9 (legislative day, JANUARY 8), 1959.—Ordered to be printed

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LETTER OF TRANSMITTAL

The honorable the PRESIDENT OF THE SENATE.
The honorable the SPEAKER OF THE HOUSE OF REPRESENTATIVES.

In accordance with section 712 (b) of the Defense Production Act of 1950, as amended, which provides for a report to the Senate and House of Representatives from time to time concerning the results of studies of this committee, together with such recommendations as it may deem desirable, there is transmitted herewith the Eighth Annual Report of the Joint Committee on Defense Production. The appendix of the report contains summaries from various departments and agencies performing functions under authority of the Defense Production Act to October 1958.

Respectfully submitted.

A. WILLIS ROBERTSON, *Chairman.*
PAUL BROWN, *Vice Chairman.*

86TH CONGRESS } SENATE { REPORT
1st Session } { No. 1

EIGHTH ANNUAL REPORT OF THE ACTIVITIES OF THE JOINT COMMITTEE ON DEFENSE PRODUCTION

JANUARY 9 (legislative day JANUARY 8), 1959.—Ordered to be printed

Mr. ROBERTSON, from the Joint Committee on Defense Production, submitted the following

REPORT

[Pursuant to sec. 712 (b) of the Defense Production Act of 1950]

INTRODUCTION

The Joint Committee on Defense Production is authorized under section 712 of the Defense Production Act of 1950, as amended, and is composed of 5 Members from the Senate and 5 Members from the House of Representatives. The committee has the responsibility of making a continuous study of the programs authorized by the Defense Production Act and of reviewing the progress achieved in the execution and administration of these programs. The committee has received periodic reports from departments and agencies performing mobilization responsibilities and has conducted hearings and staff studies covering these programs. With the passage of Reorganization Plan No. 1 in 1958, it was concluded that mobilization and civil defense are inseparable. The reports which have been furnished to this committee by the Office of Civil and Defense Mobilization and the various departments and agencies for inclusion in the appendix of this report cover both mobilization and civil defense.

CONCLUSIONS AND RECOMMENDATIONS

1. This committee has covered some of the problems of preparedness under the heading of "Preparedness Problems and the Status of Defense Mobilization." The committee continues to conclude that the big preparedness job for the nuclear age still lies ahead. During the past year your committee has emphasized the need for an overall preparedness plan as a means of moving forward in the achievement of objectives. This was set forth in a statement of the chairman of

this committee on July 10, 1958, at which time the Director of the Office of Defense and Civilian Mobilization (now OCDM) testified before the committee. The chairman stated that total mobilization requires preparedness in many areas and that in order to have a workable mobilization program there must be an overall plan which gives due consideration to each area of preparedness. The objectives should be outlined in such manner that the progress achieved from year to year will not be difficult to ascertain. In the past the absence of clearly defined objectives has made it difficult to determine the goals for the future and the progress achieved.

2. It is the recommendation of this committee that the Office of Civil and Defense Mobilization furnish this committee a report by March 31, 1959, setting forth the current status of the transportation program, and the extent to which each department and agency must rely upon transportation to meet objectives in the event of an emergency.

3. On October 31, 1957, the Director of the Office of Defense Mobilization announced the appointment of a Special Stockpile Advisory Committee to review the stockpiling policies of the Government and to advise him of its conclusions and recommendations. The report of the Advisory Committee was submitted to the Director of ODM on January 28, 1958, and included recommendations. One of the recommendations related to the declassification of stockpile information. It was stated in the report that in previous years, when achievement of stockpile goals was far from complete, there were two principal reasons for classifying activities in this area: (1) to keep foreign powers from discovering and exploiting specific weaknesses in the materials field; and (2) to protect the Government's negotiating position in purchasing large quantities of materials. After pointing out that the stockpile goals for most materials have been achieved, the Advisory Committee recommended declassification, except for special cases such as: (1) when requirements might be expected to rise sharply, (2) when classified information about military or atomic energy programs might be disclosed, (3) when disclosure of shortages of materials supplied from vulnerable foreign sources might encourage hostile acts, and (4) when necessary to protect the Government's negotiating position. The Advisory Committee stated that "declassification should cover stockpile goals, and the quantities on hand and under contract and the information made public." On August 22, 1958, the chairman of the Joint Committee on Defense Production wrote the Director of the Office of Defense and Civilian Mobilization (now OCDM), called his attention to the conclusions of the Advisory Committee, and requested information on the action contemplated by his office with respect to the recommendation on declassification. The Director of OCDM stated in his reply of August 29, 1958, that the matter was under very active consideration.

The Joint Committee on Defense Production believes, as the Advisory Committee stated, the public should be informed to the greatest extent consistent with national security of the details of the stockpile programs, including periodic reports on goals and of quantities on hand and on order. Determinations should be expedited with respect to the defense need for classifying such information for those materials which are in abundant supply. The information made available

through such determinations should be helpful in connection with the consideration of the remainder of the recommendations of the Advisory Committee.

4. Since the passage of the Defense Production Act in 1950, the Joint Committee on Defense Production has urged that Defense Production Act inventories and stockpile inventories be kept within the limits of national defense. In the seventh annual report this committee stated that defense needs should be defined in order to distinguish between defense and nondefense needs. The Special Stockpile Advisory Committee has stated that the stockpile should not be used in attempts to regulate the Nation's economy. The Joint Committee on Defense Production continues to believe that purchases of materials for both the Defense Production Act inventory and the stockpile should be limited to defense needs, and that it is not the purpose of these programs to regulate prices or to solve economic problems.

5. It appears to the committee that much information is being developed on the effects of radiation, fallout, blast damage, and related matters, in tests, studies, and through research. This work is being carried out by various departments and agencies, including the military services. The Director of the Office of Civil and Defense Mobilization may request the heads of any and all departments and agencies to advise him concerning these matters. Your committee recommends that the Director of the Office of Civil and Defense Mobilization conduct a study to determine whether the responsibilities with respect to the above subject matter for each department and agency are clearly defined; to determine the extent to which information is being exchanged between departments and agencies, and the manner in which such information is exchanged; and to report the extent to which central direction and coordination are adequate to insure the maximum use of the information developed, including the information which the public should have for their protection. It is requested that the Director of the Office of Civil and Defense Mobilization advise this committee by January 31, 1959, as to the date it is anticipated the report will be forwarded to this committee.

6. Machine tools continue to be an important factor in defense planning. Your committee believes that the inventories of tools of the military services should be maintained in a modern condition, and that adequate provision should be made in fiscal planning for a uniform Department of Defense replacement program.

It is believed that adequate provision should also be made in fiscal planning for the storage of machine tools declared excess and selected for retention in the Government reserve. Otherwise, such tools would be subject to sale as surplus items.

The issuance of the revised Armed Services Procurement Regulation on September 18, 1958, follows approximately 4 years of continuous effort on the part of your committee and its staff to effect the establishment of uniform practices throughout the armed services and other Government leasing agencies. New uniform leasing standards issued under the Armed Services Procurement Regulation should aid in helping to eliminate unfair competitive advantages where Government-owned tools are furnished to defense contractors. Your committee recommends, as it recommended 1 year ago, that the General Accounting Office review procurement contracts to determine (1) that no undue competitive advantage has been conferred on one contractor

over another; (2) that the Government has received proper consideration for the use of the tools; and (3) that a statement has been included in the contract or the contract file specifying the periodic amount of rental to be paid, either in cash or through an adjustment of the end item price.

7. The Defense Production Act, as approved on June 29, 1956, was amended by adding language to the statement of policy to give congressional approval to dispersal. The act relates dispersion to the construction of Government-owned industrial facilities, Government contracts, loans, and the procurement of goods and services. Your committee recommended in the previous annual report that the Office of Defense Mobilization review the results of Operation Alert 1957 for the purpose of determining the extent to which industrial facilities essential to national defense are vulnerable to attack, and that this committee be furnished with a report of the information revealed by Operation Alert 1957 relating to the advantages or disadvantages of dispersal in the event of an attack. This committee has not been advised as to the action taken with respect to this recommendation. It is recommended that a report covering the above portion of recommendation No. 5 in the seventh annual report be submitted to this committee not later than March 31, 1959, and that such report include similar information for Operation Alert 1958.

8. On November 8, 1956, the Office of Defense Mobilization issued a press release in which it was stated that the incentive program had been under review as a result of a proposal of a domestic company for a direct loan to assist in financing the company's project. It was indicated in the press release that Government loans had been ruled out as an incentive, and that the incentives in effect were rapid tax amortization and Government purchase contracts. Guaranteed loans were not mentioned in the press release as having been ruled out or as being in effect. In the previous annual report your committee recommended that the Office of Defense Mobilization clarify its policy with respect to the use of guaranteed loans for carrying out the purposes of the Defense Production Act. This committee has not been advised of the action taken. This committee recommends that the Office of Civil and Defense Mobilization advise this committee as to the current policy on guaranteed loans not later than March 31, 1959.

Preparedness Problems and the Status of Defense Mobilization

In submitting an annual report to the Congress from year to year this committee has attempted to make some appraisal of the status of preparedness programs and to study the information furnished by the departments and agencies with the view of making some assessment of the job ahead. In the previous annual report this committee concluded that there were many problems relating to national defense and national security still unsolved and requiring intensive study. This continues to be true. While this country has the benefit of increased productive capacity and a large stockpile of materials to assure a more rapid mobilization for limited scale war, mobilization to achieve preparedness for a nuclear attack on this country remains largely in the organizing, planning, and development stage. At the current rate of progress it would be difficult to predict the time which would be required to achieve preparedness to meet the effects of a nuclear attack on this country.

The objective of the mobilization program continues to be one of providing for the national defense and the national security. The task of formulating plans and of instituting workable programs to achieve this objective has become increasingly difficult from year to year, since effective plans and programs must give due recognition and weight to the many new factors which result from rapid technological advancement. Both plans and programs must be considered an essential part of our preparedness effort, but it must be recognized that plans cannot be accepted as a substitute for required action programs. It is generally recognized that preparedness measures must be sufficiently flexible to meet any emergency which may arise. The United States has adopted as national policy the placing of primary reliance, in the event of general war, on a strong retaliatory capability. Though adequate protective measures to meet a possible nuclear attack on this country must be developed, it is believed that past experience would indicate that limited scale war is the type of conflict which would most likely occur in the event of a new emergency in the near future. Although any assumption is subject to change, so long as limited scale war is the most probable type of conflict the traditional functions of mobilization should not be deemphasized.

In contemplating the contingencies which may arise, the possibility of a nuclear attack upon the United States cannot be overlooked. In meeting this situation, plans and programs must be based upon clearly defined objectives, and the effectiveness of such plans and programs must be judged upon the basis of probable performance should such a contingency occur. Specifically, the question arises as to the extent these plans and programs would save the lives and fulfill the needs of the population, as well as enable this country to retaliate. This would involve the further question of whether adequate medical supplies, food, and water would be available in the right places at the right time; whether our transportation system could move through fallout; whether communications and production could be maintained; and many similar problems. The responsibilities of each department and agency in the event of such an emergency are vast, and it is essential that the sum total of their efforts be directed toward the same objectives. The determinations relating to each area of preparedness must be consistent with the overall preparedness effort for which the Office of Civil and Defense Mobilization has responsibility. Since it has been determined recently that mobilization and civil defense are inseparable, the responsibility of the Office of Civil and Defense Mobilization covers both mobilization and civil defense.

During the past year this committee has emphasized the need for an overall preparedness plan as a means of moving forward in the achievement of objectives. This was set forth in a statement of the chairman of this committee on July 10, 1958, at which time the Director of the Office of Defense and Civilian Mobilization (now OCDM) testified before the committee. The chairman stated in part as follows:

> Total mobilization requires preparedness in many areas, including manpower, production, communications, transportation, utilities, stabilization, and related activities. The protection of the population and the planning for food supplies and other essential items are inseparable from our overall mobilization program.

> In order to have a workable mobilization program there must be an overall plan which gives due consideration to each of these areas of preparedness * * *.

The objectives should be outlined in such manner that the progress achieved from year to year will not be difficult to ascertain. In the past the absence of clearly defined objectives has made it difficult to determine the goals for the future and the progress achieved.

When objectives have been established, the time required to move forward from plans to programs will depend upon the availability of funds and other limiting factors. There can be no doubt as to the high cost of a civil defense program adequate to meet the needs of the population in the event of a nuclear attack. It has been pointed out by this committee elsewhere in this report that a total of $446 million has already been appropriated for civil defense.

The availability of funds for future readiness programs will be dependent upon many factors, including public acceptance. It is essential that the overall plan provide for a balanced program under varying conditions, including the availability of funds. A balanced program is made necessary because of the close relationship between different areas of preparedness. The weaknesses in specific areas of preparedness are reflected in other areas and in our total preparedness effort. For example, the effectiveness of the plans and programs of each department and agency are highly dependent upon the adequacy of our transportation system, and inadequacies in the transportation system in the event of an emergency would be reflected in those agencies having responsibility for food, resources, and other preparedness measures. It is also believed that the overall plan of the Office of Civil and Defense Mobilization should provide for priorities of action in order that preparedness measures may move forward on the basis of comparative essentiality.

The objectives of production planning for periods of national emergency or mobilization were changed significantly in the Department of Defense with the issuance of DOD Directive 4005.13 on March 27, 1958. This directive provided revised assumptions on the types of war and the availability of industrial resources for which the Department of Defense would plan. These revised assumptions specify that production planning will consider the eventualities of (1) a general war which would involve a severely damaged industrial base, and (2) a limited war with an undamaged industrial base. In general war, involving a severely damaged industrial base, planning under the revised assumptions emphasizes prewar readiness without major reliance upon postattack production. The planning for postattack production has been limited to the production and maintenance of an extremely selective group of vital items. For limited war, the planning for production emphasizes industrial readiness for immediate adjustment to accelerate production.

Efforts have been made to improve central direction and coordination for a considerable period of time. The transfer of the remaining functions of the Defense Production Administration to the Office of Defense Mobilization, on February 4, 1953, was considered to be the first in a series of moves calculated to strengthen the central direction of the mobilization program. In furtherance of this objective, a reorganization plan was submitted on April 2, 1953, which became effective

on June 12, 1953. This plan resulted in the establishment of a new Office of Defense Mobilization which combined the activities of the National Security Resources Board and both the statutory and delegated functions of the old Office of Defense Mobilization. Responsibility for major stockpiling actions was transferred to the new Office of Defense Mobilization from the Army, Navy, and Air Force (acting jointly through the agency of the Munitions Board), and the Secretary of the Interior.

The plan was designed to improve organization and to enable one Executive Office agency, the new Office of Defense Mobilization, to exercise strong leadership in our national mobilization effort, including both current defense activities and readiness for any future national emergency. Under this plan the new Office of Defense Mobilization was assigned the primary responsibility for directing and coordinating all mobilization activities of the executive branch of the Government, including those related to production, procurement, stockpiling, manpower, stabilization, transportation and telecommunications activities, and resources. Although there has been some tendency to refer to these responsibilities in terms of "nonmilitary defense," the scope of the functions of ODM has not been so limited. Under Reorganization Plan No. 3 the Director of the Office of Defense Mobilization was charged with advising the President on the coordination of the mobilization of all resources to meet civilian and military needs.

Under the Federal Civil Defense Act of 1950 (Public Law 920), the Federal Civil Defense Administration was created as an independent agency. The Federal Civil Defense Administration was assigned the primary responsibility for the development, coordination, guidance, and leadership of a national program of civil defense designed to protect life and property in the United States from attack. This act recognized that State and local governments have primary responsibility for civil defense within the States and localities. The mobilization functions of the Office of Defense Mobilization have been coordinated through representatives in 10 regional offices, and the activities of the Federal Civil Defense Administration have been coordinated through personnel assigned to 7 regional offices. The Director of the Office of Defense Mobilization and the Administrator of the Federal Civil Defense Administration each have had responsibilities relating to advance preparedness for future emergencies which were broad in scope and not easily defined. There are some areas of preparedness which relate in part to mobilization and in part to civil defense. A program to fulfill the requirements of either mobilization or civil defense is heavily dependent upon manpower, the availability and utilization of resources, the reduction of urban vulnerability, radiological monitoring, the means of assessing damage, the continuity of Government, maintaining communications and transportation, and numerous other factors.

The various departments and agencies having responsibilities for mobilization and civil defense readiness look to the Office of Civil and Defense Mobilization for the establishment of objectives, policy, and guidance. This committee has pointed out in the past that our preparedness efforts will require central direction and coordination, and it was recognized that there was need for improvement in organi-

zation to accomplish this purpose. Combining the activities of the Office of Defense Mobilization and the Federal Civil Defense Administration provides the opportunity for an improvement in central direction and the opportunity for avoiding duplication of effort and increasing efficiency. The form of organization relates to the method which is to be employed in carrying out the above objectives. The success of both mobilization and civil defense will continue to be dependent upon our ability to establish and translate objectives into such action programs as will be required to meet the defense needs in any emergency which may occur.

On the basis of preliminary fiscal year 1958 data it is estimated that in the 8 years since Korea the value of military supplies and equipment delivered, plus the value of military construction put in place, has totaled about $165.9 billion. Of this total, $126.4 billion was in hard goods, $23.8 billion in soft goods, and $15.7 billion in construction.

During the fiscal year 1958, it is estimated that $19.6 billion of military supplies and construction were delivered or put in place, including $15.4 billion in hard goods, $2.4 billion in soft goods, and $1.8 billion in construction. The estimated total of $19.6 billion for the fiscal year 1958 compares with $19.2 billion for the fiscal year 1957, $18.7 billion for the fiscal year 1956, $21.2 billion for the fiscal year 1955, $26.2 billion for the fiscal year 1954, $28.4 billion for the fiscal year 1953, $23.2 billion for the fiscal year 1952, and $9.4 billion for the fiscal year 1951.

The estimated value of military supplies and construction delivered or put in place in the fiscal year 1958 was 2 percent higher than in the fiscal year 1957, with hard goods deliveries up 6 percent, a decline of 11 percent in soft goods, and a decline of 10 percent in the value of construction put-in-place. In the hard goods category, changes in the value of deliveries ranged from an increase of 62 percent in guided missiles to a decrease of 48 percent in ammunition. Substantial increases of 12 percent and 22 percent, respectively, also occurred in aircraft and noncombat vehicles, and a moderate increase of 3 percent was registered for the ships program. There was a 24 percent decrease in weapons, a 20 percent decrease in combat vehicles, a 7 percent decline in communication and electronic equipment, a 3 percent decline in production equipment, and a 1 percent decline for other hard goods.

Although the value of aircraft deliveries increased, the number and airframe weight of aircraft accepted were both less in the fiscal year 1958 than in the preceding year, reflecting increased complexity and cost of the newer aircraft models. Airframe weight acceptances decreased from 83.9 million pounds in the fiscal year 1957 to 76.8 million pounds in the fiscal year 1958, a decrease of 7.1 million pounds or 8.5 percent.

The Department of Defense reports that the Register of Planned Mobilization Producers for March 1958, contained the names of 17,000 manufacturing plants representing slightly more than 10,000 separate firms for which the military departments are developing production schedules for emergency production of specific items. For the first time, the Register of Planned Mobilization Producers was issued as an unclassified document for sale to the public by the Government Printing Office.

The Department of Defense has issued a new policy directive covering planning with industry for mobilization and emergency production. Basically, it recognizes the need to plan to meet both nuclear war and more limited conflict. The Department of Defense reports that implementing instructions are in the developmental stages and will provide a variety of planning approaches to replace the outmoded production allocation program.

In concluding this discussion of the problems relating to military support and nonmilitary defense, it is worthy of note that the Department of Commerce, which has vast responsibilities in these fields, has concluded that progress in the field of nonmilitary defense has been rapid during the past several years—but not rapid enough to keep pace with the technological development and the related threat to national survival which make nonmilitary defense necessary. It was further concluded by the Department of Commerce that we cannot expect to progress as far as national security demands until the great value of nonmilitary defense as a war deterrent is better recognized as well as its more obvious value for the saving of life and for reconstruction in the event of actual catastrophe.

Committee Hearings and Staff Studies

In conducting a continuous study of mobilization programs, this committee has received testimony from witnesses and obtained periodic reports from various departments and agencies having preparedness responsibilities. Under the direction of your chairman, the committee staff has assisted the committee in the daily task of conducting studies and compiling information on preparedness programs, including the expenditure of borrowing authority funds. These hearings and some of the staff studies are summarized under the headings which follow:

Adequacy of Mobilization Plans and Programs—Hearing

On February 20 and 21, 1958, the Joint Committee on Defense Production met in executive session to hear Mr. Gordon Gray, Director of the Office of Defense Mobilization, on the adequacy of mobilization plans and programs to meet nuclear attack as well as limited scale war.

In his opening statement, the chairman of the committee stated in part as follows:

> The Defense Production Act is one of the main tools under which part of these mobilization functions may be carried out. Other major mobilization responsibilities are authorized under the National Security Act of 1947, reorganization plans approved by the Congress in 1953, and the Strategic and Critical Materials Stockpiling Act of 1939, as amended in 1946. The planning and programs of the Office of Defense Mobilization bear a close relationship to the Federal Civil Defense Act. Most departments and agencies have mobilization responsibilities which have been delegated to them by the Director of the Office of Defense Mobilization under one or more acts.

At the time the Defense Production Act was first passed, in 1950, it was recognized that the then existing legislation was inadequate to meet defense needs. The Defense Production Act provided additional authority and funds to accelerate and supplement defense programs. In past years much effort has been exerted to expand supplies of scarce and critical materials and to provide adequate productive facilities. Though a few materials remain in short supply, there are large quantities of most materials on hand or on order and productive capacity is at a high level.

Though solutions have been found for many problems, strength must be measured in terms of comparative capabilities.

The objective of the Defense Production Act is to provide for the national defense and the national security, and it recognizes that this requires the development of preparedness programs to reduce the time required for full mobilization in the event of an attack on the United States. Full mobilization for a limited-scale war places emphasis on productive capacity and a stockpile of materials. Current thinking on full mobilization in event of a nuclear attack appears to place greater emphasis on the availability of weapons at the time of an attack. This raises the question of the extent to which weapons on hand to meet a nuclear attack may be employed for use in a limited-scale war, and the extent to which preparations for limited-scale war serve the defense needs in event of a nuclear attack.

The test of the success of the mobilization program is whether this program provides for the national defense and national security for a nuclear attack as well as limited-scale war.

The Joint Committee on Defense Production is interested in inquiring into the mobilization plans and programs which relate to both limited-scale war and to nuclear attack. The Special Stockpile Advisory Committee, headed by Holman D. Pettibone, recently made a report to the Director of the Office of Defense Mobilization on stockpile needs, in which a shift of emphasis from raw materials to finished items was recommended. The committee will be interested in the contents of that report as it relates to our defense needs and further details on the recommended shift of emphasis.

It is anticipated that the testimony of Mr. Gray will cover, in addition to the present status of defense mobilization, the results of Operation Alert 1957, the problems and inadequacies in our present mobilization program, and the needs of mobilization in the event of a nuclear attack on our mainland.

Inasmuch as the material presented at this executive hearing has not been declassified, this material will not be summarized. The hearing related to our efforts to mobilize for emergencies and the policies of ODM in directing and coordinating the activities of the various departments and agencies responsible for carrying out mobilization responsibilities. Mr. Gray expressed the belief that mobiliza-

tion readiness should be the responsibility of the operating agencies under central coordination. He also indicated that planning cannot be entirely separated from operations, and he discussed the overlapping responsibilities of the Office of Defense Mobilization and the Federal Civil Defense Administration, which were later combined into one office under Reorganization Plan No. 1 of 1958. Problems were discussed relating to production, health, stabilization, transportation, manpower, telecommunications, and plans and readiness. These areas were related to the different types of emergencies which could arise.

DEPARTMENT OF AGRICULTURE—HEARING

On July 10, 1958, Mr. True D. Morse, Under Secretary of Agriculture, testified before the committee on the mobilization responsibilities of the Department of Agriculture.

The primary function of the Department of Agriculture in either peace or wartime is to assure the needed production, processing, and distribution of food. Its delegated authorities are said to augment already existing authorities and to provide the tools or means by which the Department could function effectively under emergency conditions. Under peacetime and wartime conditions the Department evaluates requirements for food and, if appropriate, takes action to produce the types and amounts of food needed to meet requirements. Mr. Morse states that the Department is undertaking research and other measures needed to provide protection of our crops and livestock to assure the availability of safe food for human consumption in a postattack period. He further states that under emergency conditions it will coordinate any food procurement and, if necessary, procure food directly for emergency distribution programs and request assistance from other resource agencies in making available nonfood materials and manpower required to do the food job.

Mr. Morse stated that the Commodity Credit Corporation inventories of wheat, rice, soybeans, peanuts, and dairy products would be something like enough food for 109 days for our present population. He added that if the circumstances were such that instead of feeding corn, oats, barley, and other feed grains, and these were used for food, the number of days would be about doubled. This was figured at the rate of 2,900 calories per man-day's supply of food.

The most vulnerable storage stocks in the event of an attack were said to be the commercial grain storage capacity in large cities, but that grain storage is widely dispersed throughout the country. Very few of the farm storage facilities and Government-owned bins are in critical target areas. It was also pointed out that we are favored in this country with a climate which permits production of crops in some parts of the United States all year.

In order to determine the vulnerability of important food processing and storage facilities, the Department of Agriculture has, through its county offices, assembled a list of all such facilities of more than local importance. From other sources, it has obtained information on the capacity of many of these food processing facilities. Information has been obtained on capacities of all cold-storage facilities and all commercial grain storage. This data and other pertinent information has been sent to the Department's relocation site and to the Department's regional liaison representatives. It is reported that for a few

food industries further dispersal would be desirable from a defense food standpoint and that these industries will be encouraged to locate any new plants in areas of relatively low vulnerability.

It was stated that an appraisal of the dispersal and vulnerability of food processing industries made during Operation Alert, 1957, indicates extreme variation, from the cane sugar refineries in which nearly all of the capacity is in critical target cities, to the beet sugar industry whose plants are all located outside the probable target areas. There would have been distribution problems under Operation Alert, 1957, assumptions, since most wholesale facilities are located in metropolitan areas.

Mr. Morse reported that the effect of nuclear weapons on soils and future farm production would have made only a small part of the crop, pasture, and rangeland unsafe for production of even leafy green vegetables and dairy products. It was further stated that potatoes, small grains, fruits, sweet corn, and nonleafy vegetables could have been safely produced on almost all cropland not damaged by bomb blast. Losses of livestock under the assumed attack pattern were said to have been approximately 5 percent of beef cattle, sheep, and poultry and about 10 percent of hogs and dairy cattle. While about a third of the important meat processing facilities would have been damaged, it was stated that the effect on meat production would have been much less. It was found that the greatest effect would have been to reduce the usable milk production by about 20 percent. Overall, it was concluded by the department that farmland resources would have remained in fairly good condition, and that the critical areas would have been manpower and materials for farm production and rehabilitation of food processing and distribution facilities.

Food is on the list of essential survival items. The Department of Agriculture has reported that they have studied the probable effects of an attack on this country on food supplies and have found that until extensive shelters are built to protect the people the proportion of food resources that would survive would probably be greater than of the population. The Department has stated that people need to maintain sufficient food in their homes to meet their own needs during a period when fallout could make it unsafe to get food from otherwise available sources. They have stated that as a matter of personal survival planning each family should acquire and maintain a stock of food sufficient for the family for at least 2 weeks, and such home food stocks should consist of foods which can be prepared for family consumption even if gas and electricity for cooking are shut off. The Department has reported that nearly all areas have at least 2 weeks' stocks of food in retail and wholesale stocks and that these would be usable in areas wherever the surviving population can get to them. They have also reported that there will be large additional supplies in other parts of the Nation and the major share of this food is in areas relatively unlikely to be hit by bombs.

On the basis of current planning assumptions, the Department of Agriculture believes that the surviving food stocks plus our food-production potential in a postattack period will be adequate to feed the surviving population if farmers can obtain necessary production requisites. They have stated that undoubtedly consumers would receive less highly processed foods under such conditions and would have to do many of the food-preparation jobs now done by the processors.

The Department has stated that the total amount of food available should provide an adequate diet both in terms of total quantity and nutritional quality. It is the expressed belief of the Department of Agriculture that, since adequate supplies of dometsically produced foods are likely to be available on a national basis following an emergency, it is not necessary to augment such supplies with a special national food stockpile unless shelters are built. They have expressed the belief that any plans for a national shelter program should include plans to stock such shelters with food.

OFFICE OF DEFENSE AND CIVILIAN MOBILIZATION—HEARING

On July 10, 1958, Gov. Leo A. Hoegh, Director of the Office of Defense and Civilian Mobilization (now the Office of Civil and Defense Mobilization), testified before this committee.

The chairman of the committee stated in his opening statement that total mobilization requires preparedness in many areas, including manpower, production, communications, transportation, utilities, stabilization, and related activities. He also stated that the protection of the population and the planning for food supplies and other essential items are inseparable from our overall mobilization program. The chairman pointed out that in order to have a workable mobilization program there must be an overall plan which gives due consideration to each of these areas of preparedness, and that the various departments and agencies have the task of developing certain specific areas under the coordination of the Office of Defense and Civilian Mobilization. The committee was interested in receiving testimony as to the manner in which the mobilization programs for specific areas fit into an overall plan, what the combined mobilization programs seek to achieve at the time of an emergency, the current status of the programs, and the objectives for the period ahead. In connection with the review of preparedness programs, the chairman called attention to the fact that since 1951 more than $446 million have been appropriated to the Federal Civil Defense Administration and about $14½ million for the Office of Defense Mobilization, not including appropriations for stockpiling and the expansion of industry. The scope of the interest of the committee was set forth in the letter which the chairman addressed to the Director of the Office of Defense and Civilian Mobilization prior to the date of the hearing. In this letter it was stated that the testimony should include such matters as changes in mobilization planning and programs to meet all emergencies; delegations to departments and agencies and the division of responsibilities to meet problems in the event of nuclear attack on this country; the administration, review, coordination, and direction of mobilization programs; changes in mobilization and stockpiling concepts for limited scale war and defense against nuclear attack; plans and programs for feeding the population in the event of nuclear attack; plans for the use of CCC inventories of food and fiber and the adequacy of such stockpiles to meet the needs of the population; the division of responsibilities in the production and distribution of food in the event of an emergency; the responsibilities which would be performed by local, State, and Federal personnel; plans and programs for the protection of the population and workers and the continuity of production; current thinking

on the dispersal of facilities and the results achieved under delegations made; conflicts in responsibilities among departments and agencies engaged in nonmilitary defense activities; the current objectives of the mobilization program; plans and programs for the stockpiling of survival items; the current thinking on the upgrading of materials, the stockpiling of finished items, and the present status of the recommendations contained in the study of the Special Stockpile Advisory Committee; and such other matters as relate to the extent to which the current mobilization program meets the current defense need.

In testifying before this committee, Governor Hoegh stated that the merging of the Federal Civil Defense Administration and the Office of Defense Mobilization places in one agency, within the Executive Office of the President, all of the responsibility for the nonmilitary defense activities of the Government, and that unified direction is now established. He states that it is the job of the new office to weld and develop those closely related programs of civil defense and defense mobilization into a single completely integrated plan for the mobilization of the Nation, designed to meet any kind of threat which may arise.

It was stated that a national civil-defense plan was recently completed. As stated in the plan, the civil-defense mission is to protect life and property from the effects of attack by preparing for and by carrying out emergency functions to prevent, minimize, and repair injury and damage. This plan is said to set forth step by step how the mission is to be accomplished, and by whom. It is the responsibility of the Government to furnish warning of enemy attack to the people, and the plan notes that the North American Air Defense Command has the responsibility of detecting an enemy air or missile attack. Civil-defense warning officers are on duty around the clock and have simultaneous access to warning information. ODCM provides warning over its national system to strategic points throughout the Nation. On the date of the hearing ODCM could transmit warning to 200 key points within 90 seconds. By July 1959, it is said there will be 276 points, 88 radio stations, and 12 radio networks on the warning system. States will disseminate warnings to local governments and they, in turn, to the general public. Governor Hoegh states that ODCM will assist in the development of their warning systems through contributions and by guidance and direction. The objective of ODCM is to develop a system by which all people will receive warning simultaneously.

Another function which is considered essential is to provide the capability for governments to communicate during an emergency. It is said that this capability must exist between the Federal, State, and local levels. ODCM maintains communications at all times to their regional offices and to the States. However, the system is primarily teletype and telephone. Radio backup from national headquarters to the regions is to be installed in 1959, and to the States by 1962. The State and local governments are to maintain communications necessary for their own emergency operations. Governor Hoegh stated that through the contributions program which the Congress has provided the States and the local communities are backed up by radio communications much better than from the Federal to the regions and to the States.

The plan provides that control centers and emergency government relocations will be established preattack by national headquarters of Federal agencies, by Federal field establishment, and by each State, possession, and Territory, and by each target area city, with communications maintained at all times.

The Federal Government has an established control center. In 1959, ODCM plans to construct regional underground centers. Matching funds are said to be available to States and cities for this purpose. On the date of the hearing there were 70 State control centers, or alternate operation sites, and close to 1,800 at the local level. They range from meeting the most rigid specifications to the selection of alternate sites by using facilities of nearby communities.

The opinion was expressed that survival of the Nation will depend upon the ability of government at all levels to operate in an emergency. ODCM is urging governments to establish lines of succession for key personnel, to preserve essential records necessary for the operation of the Government and necessary for the preservation of the rights of the individuals, to establish alternate Government sites or control centers, and to make full use of all Government personnel and resources. ODCM feels that the 7½ million Americans now in Federal, State, and local governments must all have emergency assignments and be trained and prepared to perform them, and be augmented through the use of trained volunteers.

The Federal Government is financing survival studies in 45 States, 3 Territories, and 173 metropolitan areas to provide information on facilities, resources, and manpower. These studies will be completed in 1958, following which detailed operational plans will be prepared by the State and local governments, based upon the survival studies and upon the national civil-defense plan. Other sections in the plan provide for warning the population relative to the hazard of radioactive fallout, the course of action to be taken by individuals upon hearing the warning signals, plans for radiological defense, research, and training, public education, disaster services, use of resources, restoration of public facilities and utilities. In this plan an effort is made to set forth what is expected of the citizen, the Federal Government, the State government, and the local governments. It was stated that ODCM is modifying the national civil-defense plan by incorporating in it the defense mobilization objectives and functions.

With respect to materials and facilities, the progress toward readiness has been very substantial. The strategic and critical materials stockpile is, with very few exceptions, in good shape. New concepts of wartime requirements are being pursued to the end that materials in the stockpile will be in a form and at a physical location most useful in an emergency. In the civil-defense stockpile, through the fiscal year 1957, there had been expenditures of $213,360,000. This has been spent for medical supplies, emergency hospitals, and for engineering equipment. In the hospital supplies there are 1,932 emergency hospitals. These are complete mobile hospitals, and are distributed throughout the country.

Governor Hoegh stated that just recently the administration announced for the first time a national shelter policy, urging that all people provide a fallout shelter for their protection, backed up by Federal example. He states that in this policy it is asked that all

Federal buildings to be constructed provide fallout shelter. An effort is being made to obtain funds to provide prototype shelters in various parts of the country. This policy also includes making surveys of existing facilities which are capable of providing protection. The educational program is being accelerated in order to inform the people of the threat and what they can do to meet this threat.

Governor Hoegh stated that the people cannot be expected to rally behind and to support civil defense until governments at all levels are capable of leading and directing, and that the Federal Government must lead. He stated that manpower remains one of our most vulnerable resources, and that critical skills are most difficult to replace. Progress was reported in the registration of scientific and technological specialists, in planning with the Department of Defense and the Selective Service System for the most effective use of scientific skills, and the development of the executive reserve to fill wartime Government positions.

According to the testimony, Russia is taking civil defense more seriously than they have in the past, and they are making some provisions for shelter. It was also stated that every person in Russia is required to take 22 hours of civil-defense instruction in 1958–59.

DEPARTMENT OF COMMERCE—HEARING

On July 10, 1958, Mr. H. B. McCoy, Administrator of the Business and Defense Services Administration, Department of Commerce, testified before this committee. The Department of Commerce has numerous mobilization responsibilities, including priorities and allocations, determinations relating to essential survival items, providing estimates for materials and facilities for a stepped-up or all-out mobilization, conducting studies of potential mobilization deficiencies, rating the essentiality of facilities and products, and providing guidance for the continuity of production, and dispersion.

Mr. McCoy stated that there had been two major actions of the Congress with respect to mobilization since the Secretary of Commerce submitted a statement to this committee. He stated that extension of the Defense Production Act for 2 years will provide for the continuation of the basic programs essential to defense. He stated that the approval of Reorganization Plan No. 1 of 1958 providing for the merger of the Office of Defense Mobilization and the Federal Civil Defense Administration is considered to be a major step toward improved management, greater efficiency, more effective planning and possible economies.

Mr. McCoy stated that the programs of the Department of Commerce for the past 5 years have been constantly evolving in the light of changing world conditions and the increased seriousness of the threat to the security and peaceful pursuits of the Nation. These activities have had to take into account the development of programs to meet all emergencies. He stated that the Department of Commerce is at this time concentrating much of its efforts on production and plans to help deter nuclear attack, or to survive as a Nation should deterrence fail and an attack occur. It was also stated that while a strong shift toward planning for this type of emergency merely reflects the advances in weapons development of the past years,

mobilization planning for a possible conflict in other parts of the world cannot cease.

The technical competence needed for industrial mobilization and the fostering, promotion, and development of industry and commerce is combined in the same personnel. It is believed that the mobilization studies relating to the measurement of survival items and national inventories may well afford the Department of Commerce the type of national economic data which can be highly useful in the normal daily operations of the Department. Economic studies such as those completed at the request of the Congress on nickel, pulp and paper, and ferrous scrap have peacetime utility as well as mobilization planning uses.

The view was expressed that much had been done in mobilization planning in the production and transportation areas, but that this job is far from being completed. It was also stated that planning is never completed if it is to be kept up to date. It was pointed out that most of the planning in the past has been for the type of war which has been fought, and that planning was started last year for the type of war which has never been fought. Mr. McCoy stated that this presents a real challenge to those who are charged with mobilization planning because there has been no experience heretofore in meeting most of these problems.

It was stated that on the basis of preliminary work already done the effect of a nuclear attack upon supplies of some essential items, and upon productive capabilities after an attack, would be tremendous, and it would be doubtful that we would have some survival items at all for use.

The obtaining of national inventory data for survival items currently identified is reported to be a job of enormous proportions but necessary for the total consideration of the survival items program. Until such data are available and can be matched against estimated requirements for these same items under assumed attack conditions, the Department will not know the extent to which post attack needs can be met nor will they be able to decide upon remedies to meet potential short supply situations.

With respect to transportation, the view was expressed that in any future emergency many of our difficulties which would be at the grassroots or at least on an area basis and that an organizational structure to control transportation should be fashioned so that controls could be exercised at the regional level in the event the national organization were completely cut off from the regional organizations. It was also stated that the emergency transport agency should assume control only over that transport capacity which could be effectively and efficiently utilized in the transportation of personnel and property between producing and consuming centers. The local pool of local urban transportation would thus be left available to the local governmental organizations for use in civil defense activities in an emergency. The planning of the Department is being geared to an organization which contemplates two echelons of control—policy emphasis at the national level—operational emphasis at the regional level.

The Weather Bureau of the Department maintains a continuous capability to advise interested organizations on areas likely to be affected by fallout as a result of nuclear attack. The Bureau routinely

prepares fallout forecasts based upon existing weather conditions at 65 key points in the United States. Research is being conducted to improve techniques of predicting fallout and the Weather Bureau is participating in the Federal fallout monitoring network which when fully developed will call on some 300 separate reporting facilities to monitor and report fallout intensities on a routine basis during peacetime and on an accelerated basis during an emergency.

The problem of the continuity, or restoration, of production following a massive nuclear attack is considered to be extremely complex. The industrial defense program has kept continuity of production as a major objective, but in the actual development of its program only certain phases have been stressed. These phases are continuity of management and records protection. Departments and agencies dealing with the production chain have approached the problem on an industry-by-industry and a company-by-company basis. The problem this generates is illustrated by the approach to the survival of the labor force without which there would be no continuity of production. Except during the workday at the plant, the labor force is part of the general population whose survival is the responsibility of civil defense, and any program aiming at continuity of production must include the preservation of the labor force. It appears to the Department of Commerce that the time has come for a reappraisal of the industrial defense program. Thus, the difference in the relative vulnerability as between industrial plant and the labor force on the effects of thermonuclear radiation fallout illustrates the type of current knowledge which must be incorporated in the program.

The prepared statement of the Department of Commerce was concluded with the statement which follows:

> To summarize briefly, it is the Department's view that progress in the field of nonmilitary defense has been rapid during the past several years—but not rapid enough to keep pace with the technological developments and the related threat to national survival which make nonmilitary defense necessary. As the history of war has unfolded from the age of the condottiere in the Middle Ages, to the citizen army of Napoleon, to the reliance on the industrial might of the United States arsenal of democracy in World War II, concepts have changed and planning has found it hard to project itself forward to the problems of the war that had never been waged. Once again we find ourselves in that position.
>
> Prudence dictates that judgments be made with humility. When the lives of hundreds of millions of people may depend on the consequences of decision, rash indeed would be the man who proclaimed with certainty in the face of a situation which frequently becomes more and more uncertain with the addition of each fragment of speculative judgment.
>
> To some extent it is possible to discuss organizational arrangements, delegations of responsibility, and administrative procedures that have hindered progress in nonmilitary defense. It is our view, however, that these are not causes so much as results. There remains a serious question as to whether human beings have the capacity to think through the

awesome consequences of a nuclear attack and develop the most effective means of dealing with them.

Under the authority currently granted the executive branch by the Congress, this objective is being avidly sought. To the extent this committee can contribute to this end, its efforts will be of inestimable benefit to the people of this Nation and their friends in allied countries.

Comments on Report of Special Stockpile Advisory Committee

On October 31, 1957, the Director of the Office of Defense Mobilization announced the appointment of a Special Stockpile Advisory Committee to review the Government's current stockpiling policies and programs and to advise him of its conclusions and recommendations. The Stockpile Advisory Committee, under the chairmanship of Holman D. Pettibone, chairman of the board, Chicago Title & Trust Co., consisted of 12 leading industrialists and public officials whose previous Government service afforded them a broad background in matters relating to the stockpile program.

In appointing the Advisory Committee, the Director of ODM stated that the fundamental and far-reaching changes that have taken place in weapons development in the United States, as well as in assumed enemy capabilities, had convinced him that there is an urgent need to review the bases underlying the pattern of stockpile planning and management that was established several years ago.

The report of the Special Stockpile Advisory Committee was submitted to the Director of ODM on January 28, 1958, and included recommendations. In releasing the report, the Director of ODM stated that ODM would undertake a prompt analysis of the report, and that he would seek the views of those agencies directly concerned with the stockpiling of these materials.

One of the significant recommendations of the Advisory Committee related to the declassification of stockpile information. It was stated in the report that in previous years, when achievement of stockpile goals was far from complete, there were two principal reasons for classifying activities in this area: (1) to keep foreign powers from discovering and exploiting specific weaknesses in the materials field; and (2) to protect the Government's negotiating position in purchasing large quantities of materials. After pointing out that stockpile goals for most materials have been achieved, the Advisory Committee recommended declassification, except for special cases such as: (1) When requirements might be expected to rise sharply, (2) when classified information about military or atomic energy programs might be disclosed, (3) when disclosure of shortages of materials supplied from vulnerable foreign sources might encourage hostile acts, (4) when necessary to protect the Government's procurement negotiating position. The Advisory Committee stated that "declassification should cover stockpile goals, and the quantities on hand and under contract and the information made public."

On August 22, 1958, the chairman of the Joint Committee on Defense Production wrote the Director of the Office of Defense and Civilian Mobilization (now OCDM), called his attention to the conclusions of the Advisory Committee, and requested information on the action

contemplated by his office with respect to the recommendation on declassification. On August 29, 1958, the Director of the Office of Civil and Defense Mobilization wrote the chairman of the Joint Committee on Defense Production in part as follows:

> The matter is under very active consideration of this office. After preliminary conversations with representatives of other Government agencies, the necessary steps are being taken for formal interagency examination of stockpile data susceptible of declassification. Such an examination is being made in accordance with the policy set forth in paragraph 14 of Defense Mobilization Order V–7, which, as you recall, was issued on June 30.

Paragraph 14 of Defense Mobilization Order V–7 states that the Office of Defense Mobilization (now OCDM) shall declassify stockpile data to the maximum extent feasible when it determines with the concurrence of agencies concerned that the national security would not thereby be jeopardized.

The Joint Committee on Defense Production believes, as the Advisory Committee stated, the public should be informed to the greatest extent consistent with national security of the details of the stockpile programs, including periodic reports on goals and of quantities on hand and on order. Determinations should be expedited with respect to the defense need for classifying such information for those materials which are in abundant supply. The information made available through such determinations should be helpful in connection with the consideration of the remainder of the recommendations of the Advisory Committee.

Since the passage of the Defense Production Act of 1950, the Joint Committee on Defense Production has urged that Defense Production Act inventories and stockpile inventories be kept within the limits of national defense. In the seventh annual report this committee stated that accelerated purchases of materials for Government inventories for the purpose of solving economic problems tend to postpone rather than provide permanent solutions. It was also pointed out in this report of the joint committee that defense needs should be defined in order to distinguish between defense and nondefense needs. In a hearing on July 10, 1958, the chairman of this committee inquired as to the position of the Department of Commerce on this subject. The Administrator of the Business and Defense Services Administration stated that the Secretary of Commerce agreed that if domestic support programs for the stabilization of domestic industry are undertaken, such programs should be so labeled. In line with the previous statements of the joint committee, the Special Stockpile Advisory Committee stated that the stockpile should not be used in attempts to regulate the Nation's economy. The joint committee continues to believe that purchases of materials for both the Defense Production Act inventory and the stockpile should be limited to defense needs, and that it is not the purpose of these programs to regulate prices or to solve economic problems. The joint committee also believes that determinations with respect to the action to be taken on the recommendations of the Special Stockpile Advisory Committee should be expedited.

The report of the Special Stockpile Advisory Committee follows:

STOCKPILING FOR DEFENSE IN THE NUCLEAR AGE

A report to the Honorable Gordon Gray, Director of the Office of Defense Mobilization, by the Special Stockpile Advisory Committee, January 28, 1958

SPECIAL STOCKPILE ADVISORY COMMITTEE

Holman D. Pettibone, Chairman
Earl L. Butz
Donald F. Carpenter
Frederick C. Crawford
Edwin L. Crosby, M. D.
Henry H. Fowler
John D. Morgan, Jr.
Arthur W. Radford, Admiral, United States Navy (retired)
Walter Bedell Smith, General, United States Army (retired)
James E. Webb
Walter G. Whitman
Clyde Williams
Arthur Wolf, executive director

LETTER OF TRANSMITTAL

JANUARY 28, 1958.

Hon. GORDON GRAY,
Director, Office of Defense Mobilization,
Executive Office of the President, Washington, D. C.

DEAR MR. GRAY: On October 31, 1957, you appointed the Special Stockpile Advisory Committee to review the Government's current stockpiling policies and programs. It was your wish that the Committee report to you shortly after January 1.

All members of the Committee concur in the following report which is submitted for your consideration.

Section I contains a summary of our findings and recommendations.

Section II sets forth in detail important elements of our studies, and reasons for our conclusions and recommendations.

Section III outlines pertinent information concerning the members of the Committee and staff and the Committee's operations.

It is our understanding that our function is to advise you, and that you are free to accept, modify or reject any of the recommendations made.

We now recommend that the Committee be discharged.

Respectfully submitted.

HOLMAN D. PETTIBONE, *Chairman.*

SECTION I

SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

The supply expansion programs initiated during the Korean war and the stockpiles accumulated by the Government virtually eliminate the threat of raw material shortages of the type that impeded past defense mobilization efforts.

The $7,350 million worth of strategic and critical materials in Government inventories, plus production in the United States and readily accessible foreign areas, with a few relatively minor exceptions could easily support an expanded defense industry for several war years.

In previous wars, time and distance helped keep hostile attack from American shores. This may no longer be true. The protection afforded previously by ocean barriers may have vanished with the advent of new weapons and the means of delivering them.

Raw material consuming facilities are generally more vulnerable bombing targets than are raw material producing facilities and inventories. This lessens the probability of serious material shortage problems in nuclear war.

Therefore, the need for strategic and critical materials would be greater in a limited war, or in an economic or political conflict, than in a nuclear war.

SURVIVAL, RELIEF AND REHABILITATION

As nuclear attack is today a distinct possibility and threatens the very survival of the American people, this Nation must attain and maintain a position of preparedness that is flexible, balanced, and within its capabilities.

Annual military expenditures now total about $40 billion. In addition, the Government maintains materials stockpiles and industrial facilities valued at many billions of dollars to support the defense effort. Yet for human survival and relief the Government has stockpiled items, principally medical, amounting to only about $200 million.

The Committee recommends that in stockpiling, emphasis be shifted from raw materials to finished items and vital supplies for survival, relief, and rehabilitation. Energetic steps should be taken to make coordinated studies in this area and to initiate appropriate programs. (See supplementary statement by Henry H. Fowler in the appendix.)

STRATEGIC AND CRITICAL MATERIALS

The stockpiling of materials is still a major element of any preparedness program. Accordingly the Committee makes the following recommendations:

1. All stockpile planning should be revised to conform to the present policy which limits new procurement to meeting shortages for a 3-year emergency period.

2. A new method should be adopted for estimating emergency requirements based generally on industrial consumption patterns, adjusted for emergency conditions. Additional provision should be made for major military and atomic energy programs, as well as for new and increasing uses of high-temperature and other special-property materials.

3. The present methods of estimating reliable supplies for an emergency should be continued.

4. Two stockpile goals should be established for each material, and reviewed annually: (*a*) Minimum goals which would assume reasonable reliance on all accessible overseas sources; (*b*) greater security goals which would assume reliance only on sources in the general North American area. Attainment of the minimum goals should be given priority. It should be noted that application of the greater security goals concept to perishable materials would be an enlargement of present practices.

5. When additional amounts of a material are no longer needed for national security, outstanding contracts for future delivery should, if possible, be terminated by reasonable negotiated settlements.

6. The Director of the Office of Defense Mobilization should seek more flexible authority to dispose of surplus materials. This would involve a request for amendment of pertinent legislation. Also the current executive disposal policy should be rescinded.

7. Perishable materials in excess of the greater security goals should be disposed of, when this can be done without unduly interfering with usual markets.

8. In view of current conditions, all commercially usable metals and minerals in excess of the greater security goals should be retained, except when utilization of any portion of the excess of these materials would be in the interest of national security.

9. Materials not meeting stockpile procurement specifications should be upgraded when feasible, otherwise these materials should be disposed of, when this can be done without undue interference with usual markets. Subspecification-grade metals and minerals should be disposed of preferably in a manner designed to encourage development of processes for treating low-grade domestic ores.

10. Quantities of any metals and minerals in excess of defense needs, to be obtained in exchange for agricultural surpluses, should be judged on a transaction-by-transaction basis, rather than under a rigid formula. Consideration should also be given to acquiring survival and relief items in exchange for agricultural surpluses.

GENERAL

The Committee recommends that the public be informed to the greatest extent consistent with national security, of details of the stockpile programs including periodic reports of goals and of quantities on hand and on order.

Agencies of the Federal Government, as listed in section III, provided information for the Committee. In addition, the Committee reviewed a number of other relevant studies.

Representatives of nongovernmental organizations were not invited to submit their views. The Committee believes that these views can be obtained more effectively by the Government, especially if there has been disclosure of stockpile contents and an explanation of the stockpile programs as recommended in this report.

SECTION II

THE REASONING OF THE COMMITTEE AND ITS SPECIFIC RECOMMENDATIONS

Introduction

The United States Government for many years has been engaged in accumulating vital stores of materials, products and facilities. All of these activities have the objective of improving our ability to cope with emergency defense conditions of cold, limited or general war.

Among the more important applications of the stockpiling principle which the Committee reviewed are:

(*a*) The strategic and critical materials stockpile presently valued at about $6,200 million.

(*b*) The Defense Production Act inventories which now include about $750 million worth of materials on hand, plus about $1,750 million worth of materials which the Government might have to purchase under outstanding contracts.

(*c*) The supplemental stockpile of strategic materials presently valued at about $400 million, accumulated in exchange for surplus agricultural commodities.

(*d*) The Federal Civil Defense Administration's stocks of survival and relief necessities valued at about $200 million.

The Committee noted the existence of, but did not concern itself with, the following applications of the stockpile principle:

1. The Atomic Energy Commission's stock of fissionable and source materials in various forms.
2. Equipment and supplies for direct use by the military services.
3. The national industrial reserve, which includes industrial plants either in operation or in standby condition.
4. The machine tool inventory valued at about $3,500 million.

In addition to the foregoing, the Government owns agricultural commodities, accumulated by the Commodity Credit Corporation under price-support legislation, valued at about $5,600 million, with additional quantities pledged against loans and valued at about $1,600 million.

The Committee has not attempted to learn the total cost of all these programs. It is informed, however, that administration, management, and custodial costs for the strategic and critical materials stockpile alone, will amount to approximately $41 million in the 1959 fiscal year.

Although all these programs are somewhat interrelated, the Committee confined its review to those dealing with strategic industrial materials, and supplies for human survival and relief. It did not inspect or verify Government inventories. Neither did it review custodial arrangements or details of acquisition or rotation of materials.

THE ROLE OF STOCKPILE IN A GENERAL WAR

Recent scientific advances throughout the world have resulted in weapons with the destructive force of millions of tons of conventional high explosives, as well as the means of delivering them with increasing accuracy and speed. There will be further advances in the development of offensive weapons and in defensive system as research progresses. Nevertheless, in any attack upon the United States, even a few atomic blasts would cause major loss of life, and devastation. Defense-assuring distances have shrunk with each advance in man's conquest of time and space. No longer is there any such thing as military isolation.

Survival, relief, and rehabilitation

The Government is now spending $40 billion a year on the military forces. It has already accumulated about $7,350 million worth of strategic and critical materials. The time has come to take action for human survival, relief, and rehabilitation in event of nuclear attack.

In the event of such an attack upon the United States, the people would have immediate need for products and services essential for survival and relief. This would include food, water, shelter, and medical and sanitation supplies

and equipment. Vast emergency engineering activity would be required to bury the dead, decontaminate radioactive areas, shelter and care for the survivors, and restore essential utilities. In such an effort, the Nation would be forced initially to rely upon whatever resources survived attack.

Measures to decrease vulnerability to attack, and to increase ability to retaliate promptly, reduce the probability of attack. Only readily usable resources will be of consequence in the period immediately following a nuclear attack. In the recovery and rehabilitation period, stocks of strategic and critical materials should be of great value, especially because they represent stockpiled power, man-hours, transportation, and facilities.

There is an immediate and urgent need for programs for human survival, relief, and rehabilitation. The expeditious development of such programs requires close coordination among the agencies sharing this responsibility.

The Committee therefore recommends that—

1. Specific plans be made to insure most effective use of resources already in being, including supplies of the Armed Forces in the United States. If existing resources are not adequate, especially those which would take a long time to produce, positive steps should be taken to augment them, by Government assistance if necessary. This might include encouraging contracting and heavy construction industries, and public and private utilities and carriers, to maintain equipment beyond their normal needs. In addition, equipment could be supplied to State and local governments to be kept in standby readiness.

2. Producers and distributors of medical, pharmaceutical and hospital supplies and equipment be encouraged to carry increased inventories in dispersed locations.

3. The possible need for readily available food supplies and potable water, protected from radioactive fallout, be assessed by civil defense authorities.

THE ROLE OF STOCKPILES IN LIMITED WARS OR IN ECONOMIC AND POLITICAL WARFARE

In a limited war, and in any intensification of economic and political warfare, it is important that the industrial economies of the United States and the other nations of the free world continue to operate at high levels.

In the event of a limited war, this country would undoubtedly embark upon additional preparation to meet the possibility of general war. There would also be a need to expand production to replenish military inventories. It would be most desirable to be able to carry out these defense programs with minimum disruption of the normal industrial economy. While there are great possibilities for expanding production of manufactured articles by the full utilization of existing facilities, this would require increased supplies of materials. In a limited war, as well as in economic and political warfare, there could be substantial interference with production and movement of offshore supplies important to the United States and its allies. In such event, stockpiles would be generally of great value.

In determining the quantity of any material to be stockpiled, there are two important steps: (1) estimating the demand in time of emergency, and (2) estimating reliable supplies.

Requirements

The Committee finds that under present procedures it has been extremely difficult to develop specific and detailed emergency requirements data for many materials for each of the five major segments of the economy: military, atomic energy, industrial, civilian, and export. Consequently, reviews of stockpiling goals have been too infrequent.

Industry today is producing substantial quantities of military goods, as well as many items for the Atomic Energy Commission. Hence, the present industrial use pattern already contains substantial provision for direct defense production. Furthermore, advances in military strategy and logistics have reduced direct military requirements for many common industrial materials. Consequently, for such materials, military wartime requirements probably will be relatively small in comparison with total industrial uses in the United States.

The Committee believes that for most materials it would be futile to attempt to calculate different sets of requirements data for limited war, and for economic and political warfare. As a general rule, quantities of raw materials to be stockpiled to meet the needs of limited war should be adequate to meet other contingencies.

The Committee recommends, therefore, that the following simplified procedure be adopted: In computing the requirements for most materials, it should be

assumed that consumption in a national emergency would be about equal to the normal rate of consumption by existing industrial capacity, adjusted for anticipated expansion and for feasible conservation and substitution measures, such as were employed in the Korean war period. When emergency consumption of any specific defense material is expected to increase sharply, above existing patterns, the Department of Defense and the Atomic Energy Commission should advise the Office of Defense Mobilization quickly, so that specific provisions can be made to meet them.

High-temperature and other special-property materials

It is not possible to know with certainty at this time which of the high-temperature or other special-property materials will be in greatest demand for specific applications, as new techniques develop from research and practice. Known world supplies of many of these materials are limited. Several, but not all, are on the stockpile list.

Up to now, conventional practices have resulted in only relatively small uses of many of these materials. However, if they become important not just as minor alloys but as metals or mixtures composed exclusively of the materials themselves, demand could increase sharply.

The Committee recommends that a mechanism be established to appraise the possible effects of research and development activities on requirements for high-temperature and other special-property materials. Instead of relying on past use patterns, possible needs 5 to 10 years hence must be surveyed and stockpiles built up as need is indicated.

Reliable supplies

The present method of estimating supplies for the calculation of stockpile goals starts with existing productive capacity and known resources. Supplies normally available to the United States are then discounted to reflect (1) the strategic vulnerability and possible economic and political instability of foreign sources; (2) overseas shipping losses; and (3) the vulnerability of domestic sources to sabotage, flood, fire, or other disasters. The Committee regards this practice as sound.

The Committee also agrees with the current concept of providing a higher degree of security in the case of metals and minerals by discounting completely all sources of supply outside the general North American area. The Committee recommends that this concept be extended to include perishable materials.

Quantities to be stockpiled

A. *Minimum goals.*—The Committee recommends that all stockpile planning be revised to conform to the present policy which limits new procurement to meeting shortages for a 3-year emergency period. Therefore, all stockpile goals computed on the former 5-year basis should be revised accordingly. In most cases revised goals will approximate the present procurement priority levels, which are generally the deficits that would exist in a 3-year period, assuming reasonable reliance on overseas sources. These 3-year goals should be attained expeditiously by new procurement or by upgrading existing Government inventories when possible. When normal sources are inadequate, supplies should be expanded, preferably in the United States or in accessible foreign sources. As the goal is approached, purchases should be tapered off in an orderly manner to avoid disruption of the usual markets.

B. *Greater security goals.*—In order to improve further our security by avoiding dependence in time of emergency on distant foreign sources of materials, the Committee recommends that greater security goals be established. These additional goals should be computed for a 3-year period, relying only on sources of supply within the general North American area. As noted previously application of this concept to perishable materials would be an enlargement of present practices.

This higher goal should be reached on a low priority basis, primarily (1) by transferring to the stockpile materials resulting from other Government programs, including deliveries under existing forward contracts; (2) by purchasing materials with foreign currencies accrued incident to foreign-aid programs; (3) by obtaining materials in exchange for United States agricultural surpluses; (4) by addtional purchases under favorable price conditions; (5) by upgrading existing Government inventories when feasible.

C. *Retention.*—The Committee recognizes that Government inventories of several materials already exceed the greater security goals recommended above.

Strategic and critical materials generally fall into two major classifications: perishable, normally of animal or vegetable origin; and nonperishable, the metals and minerals. Expansion of supplies of metals and minerals usually requires considerable time and major capital investment. Generally supplies of perishables can be expanded in a relatively short period of time. Further, perishable materials often require costly storage and replacement programs to keep them usable. The storage of metals and minerals, on the other hand, is comparatively inexpensive. Many ores, concentrates, and metals can be stored in the open and there are few rotation problems.

Consumption of most metals and minerals has increased with our industrial expansion, and may be expected to increase rapidly in the rest of the free world as the underdeveloped countries industrialize. Moreover, readily mineable domestic ore bodies have been substantially depleted, and the grade of many ores being mined domestically is declining, although this has been offset to some extent by improved methods of mining and extraction.

Accordingly, the Committee recommends that in the light of current world and domestic defense, political, and economic conditions, all metals and minerals now in Government stocks suitable for use in normal commercial processes, be retained.

SUPPLEMENTAL STOCKPILE

With respect to the supplemental stockpile created by the Agricultural Trade Development and Assistance Act of 1954, as amended, the Committee concurs in the existing practice of acquiring metals and minerals, beyond the quantities considered essential for defense purposes, when they can be obtained in exchange for United States stocks of agricultural surpluses. However, the Commodity Credit Corporation's request for appropriations to cover such transactions should not be designated as applicable to a defense activity.

Instead of following rigid formulas the Committee recommends that quantities of materials suitable for inclusion in the supplemental stockpile be judged on a transaction-by-transaction basis. Consideration should also be given to acquiring survival and relief items in exchange for agricultural purposes.

UPGRADING OF STOCKPILE MATERIALS

The Committee endorses the present general policy of stockpiling materials in the form that can be used in existing commercial processes, without appreciable loss of efficiency.

When facilities for converting materials into higher grades or into finished products are limited or are vulnerable to attack, sabotage, flood, or other disasters, a portion of the stockpile should be in a form that will permit bypassing of potential bottlenecks.

The Government has some inventories of materials that are below normal quality, and hence are not usable directly in present commercial facilities. When the quantity of a specification grade material in Government inventories is less than the greater security stockpile goal, subspecification grades of that material should be upgraded when this can be accomplished at less cost than buying new material. When upgrading is not feasible, or not necessary to attain stockpile goals, subspecification-grade materials should be considered surplus.

MAINTENANCE OF THE MOBILIZATION BASE

When there is domestic production of a strategic and critical material important to defense, there is less need for a stockpile. Many materials are not now stockpiled simply because domestic productive capacity and resources appear adequate for foreseeable future defense needs.

In some instances, stockpile procurement has been used to maintain essential productive capacity that had been threatened by economic problems. Procurement for the stockpile, however, is not necessarily either the best way or the only way of maintaining essential productive capacity. When maintenance of essential industry appears necessary, a plan should be developed to make appropriate use of each of the existing authorities of Government. These would include possible tariff adjustments, imposition of quotas, tax concessions, and the installation of Government-owned equipment in privately owned plants. If existing statutory authorities are inadequate, additional legislation should be requested. If stockpile procurement is used primarily to accomplish domestic or foreign economic objectives, such activity should be clearly explained to the public.

PERIODIC REVIEWS

The Committee recommends that the supply-demand situation and the stockpile goals for every material and product being stockpiled be reviewed at least once a year. This would insure that stockpiling plans and programs properly reflect changing patterns of use and production, and would minimize the need for great changes in either new procurement or disposal activities.

DECLASSIFICATION OF STOCKPILE INFORMATION

In previous years, when achievement of stockpile goals was far from complete, there were two principal reasons for classifying activities in this area: (1) to keep foreign powers from discovering and exploiting specific weaknesses in the materials field; and (2) to protect the Government's negotiating position in purchasing large guantities of materials. At the present time stockpile goals for most materials have been achieved.

The committee recommends declassification, except for special cases such as: (1) when requirements might be expected to rise sharply; (2) when classified information about military or atomic energy programs might be disclosed; (3) when disclosure of shortages of materials supplied from vulnerable foreign sources might encourage hostile acts; (4) when necessary to protect the Government's procurement negotiating position. Declassification should cover stockpile goals, and the quantities on hand and under contract and the information made public.

STOCKPILE MANAGEMENT

The original purpose of the stockpile program was to accumulate strategic and critical materials for use in defense of the country. During World War II, vital materials were in short supply. This shortage which continued for some time after the war ended inhibited the building of Government stockpiles. Even though some materials had been put into the stockpile there were shortages during the Korean war. These would have been more acute if the Korean war had been expanded. At that time prices paid for materials to go into the stockpile, and the economic effects on a particular industry were subordinated to the vital necessity of being prepared to fight and win.

In order to develop new sources of certain materials the Government, during the Korean war, guaranteed certain new producers that it would purchase whatever materials they could not sell at specified prices in the general market. Some of these contracts are still in effect, and will continue for as long as 5 years. They represent a contingent liability to the Government of more than $1,750 million. Government inventories of many of these materials now exceed stockpile goals. It would be unrealistic to attempt to sell any of these materials unless market prices were well above those at which the Government must accept tenders from producers. Demand would have to be so strong that Government sales would not depress the price to, or below, the contract price obligation of the Government. Such is not presently the situation in most cases.

Timing and manner of stockpile purchases and sales can have far reaching impacts on domestic and foreign markets, and on foreign relations. While these factors must not be overlooked in management of the stockpile, emphasis should always be on national defense and survival needs. The stockpile should not be used in attempts to regulate the Nation's economy.

The committee endorses the present general policy under which both acquisitions for and disposals from Government stocks are to the maximum extent practicable carried on through normal trade channels.

It is highly desirable in this period of world uncertainty that the Director of the Office of Defense Mobilization possess great flexibility in all phases of stockpile management. The Director now has a high degree of flexibility in acquiring materials for the stockpile. However, legislative and executive policies present serious obstacles to disposal, including sale, of materials from the stockpile. The Stock Piling Act requires either express or implied congressional approval of disposition or sale. (See sec. 3e of the Strategic and Critical Materials Stock Piling Act quoted in the appendix.) In addition, there is an executive policy in effect which requires that a whole inventory of a material be declared no longer needed for defense purposes before any surplus quantity of that material may be sold. The committee considers this policy no longer appropriate.

The committee recommends that: (*a*) the executive policy be rescinded; (*b*) the Congress be requested to modify present restrictive statutory provisions in a

manner to permit the disposal of stockpile surpluses, by sale or otherwise, without the necessity of obtaining express approval of the Congress.

Utilization of Government inventories

The earlier recommendation of the committee that all inventories of metals and minerals be retained is not intended to preclude the utilization of any portion of the inventories beyond the greater security stockpile goals, when the Director of the Office of Defense Mobilization finds that to be in the interest of national security.

Disposal of surpluses

The committee recommends that perishable materials in excess of the greater security stockpile goals be sold or otherwise disposed of when this can be done without causing serious domestic or foreign economic disruption or international political situations contrary to interests of the United States.

The committee recommends that sub-specification-grade materials unsuitable for upgrading be disposed of, when this can be done without undue interference with usual markets. Sub-specification-grade metals and minerals should be disposed of, preferably in a manner designed to encourage development of processes for treating low-grade domestic ores.

Forward contracts

The committee further recognizes that contracts involving commitments for the Government to buy materials under specified conditions, running several years into the future, could result in additional deliveries in excess of the greater security stockpile goals.

The committee recommends that these commitments be carefully reviewed for the purpose of negotiating reasonable settlements, possibly involving payments for cancellation of rights to make future delivery to the Government, when such action would not jeopardize expansion projects essential to national security.

SECTION III

THE COMMITTEE

Committee member	Present connection	Recent Government service
Mr. Holman D. Pettibone	Chairman of the board, Chicago Title & Trust Co., Chicago, Ill.	Chairman, Rubber Producing Facilities Disposal Commission, 1953–55.
Dr. Earl L. Butz	Dean, School of Agriculture, Purdue University, West Lafayette, Ind.	Assistant Secretary of Agriculture.
Mr. Donald F. Carpenter	General manager, film department, E. I. duPont deNemours Co., Wilmington, Del.	Chairman, Munitions Board, and Chairman, Military Liaison Committee to the Atomic Energy Commission, Defense Department.
Mr. Frederick C. Crawford	Chairman of the board Thompson Products, Inc., Cleveland, Ohio.	Manufacturer of aircraft components for the Government, in World War II and Korean war.
Dr. Edwin L. Crosby	Director, American Hospital Association, Chicago, Ill.	Member, Health Resources Committee, ODM.
Mr. Henry H. Fowler	Member, law firm of Fowler, Leva, Hawes & Symington, Washington, D. C.	Director, Office of Defense Mobilization; Assistant General Counsel, War Production Board.
Dr. John D. Morgan, Jr.	Minerals consultant, Washington, D. C.	Staff, National Security Resources Board and ODM.
Adm. Arthur W. Radford	U. S. Navy, retired	Chairman, Joint Chiefs of Staff.
Gen. Walter Bedell Smith	U. S. Army, retired, vice chairman of the board, American Machine & Foundry Co., New York, N. Y.	Under Secretary of State.
Mr. James E. Webb	President, Republic Supply Co., Oklahoma City, Okla.	Director, Bureau of the Budget; Under Secretary of State.
Mr. Walter G. Whitman	Head, department of chemical engineering, Massachusetts Institute of Technology, Cambridge, Mass.	Chairman, Research and Development Board, Defense Department.
Mr. Clyde Williams	Until Jan. 1, 1958, president, Battelle Memorial Institute, Columbus, Ohio; now president, Clyde Williams & Co.	Chairman, World War II Metallurgy Committee and member of Materials Advisory Board, National Academy of Sciences.

THE COMMITTEE STAFF

Arthur Wolf, ODM, executive director
James P. Durkin, ODM, counsel
Elva Taylor, ODM, executive Secretary
Maj. Gen. Alfred H. Johnson, USAF (retired), consultant
Paul R. Leach, consultant

Government agencies assisting the Committee with presentations or documents, or both, were:

The Department of State
The Department of Defense
The Department of the Interior
The Department of Agriculture
The Atomic Energy Commission
The Federal Civil Defense Administration
The General Services Administration
The National Advisory Committee for Aeronautics
The Materials Advisory Board of the National Academy of Sciences

In addition, the staff of the Office of Defense Mobilization was extremely helpful, and cooperative.

APPENDIX I

Mr. Henry H. Fowler desires to make the following additional comment:

"Even though I concur in this report, I feel compelled to add a comment on the particular point which is discussed in the summary under the heading 'Survival, Relief and Rehabilitation.' It is my strong conviction that the 'energetic steps' referred to in the final sentence of this section should include specifically early action by the executive and legislative branches of the Federal Government to get the program under way by enactment of the initial appropriations which such program will require, and by the procurement of items covered by such initial appropriations.

"The 'coordinated studies' referred to in the report should have great value in working out a comprehensive long-range program in this area. But I feel that the urgency of the situation is sufficiently great, and the information already available is sufficiently extensive to warrant decisive action to initiate the program."

APPENDIX II

Excerpt from the Strategic and Critical Materials Stockpiling Act, as amended:

"SEC. 3. The Director of the Office of Defense Mobilization shall direct the Administrator of the General Services Administration, to—

"(e) dispose of any materials held pursuant to this Act which are no longer needed because of any revised determination made pursuant to section 2 of this Act, as hereinafter provided. No such disposition shall be made until six months after publication in the Federal Register and transmission of a notice of the proposed disposition to the Congress and to the Military Affairs Committee of each House thereof. Such notice shall state the reasons for such revised determination, the amounts of the materials proposed to be released, the plan of disposition proposed to be followed, and the date upon which the material is to become available for sale or transfer. The plan and date of disposition shall be fixed with due regard to the protection of the United States against avoidable loss on the sale or transfer of the material to be released and the protection of producers, processors, and consumers against avoidable disruption of their usual markets: *Provided*, That no material constituting a part of the stockpiles may be disposed of without the express approval of the Congress except where the revised determination is by reason of obsolescence of that material for use in time of war. For the purposes of this paragraph a revised determination is by reason of obsolescence if such determination is on account of (1) deterioration, (2) development or discovery of a new or better material or materials, or (3) no further usefulness for use in time of war."

REORGANIZATION OF OFFICE OF DEFENSE MOBILIZATION AND THE FEDERAL CIVIL DEFENSE ADMINISTRATION

On July 1, 1958, the Office of Defense Mobilization was consolidated with the Federal Civil Defense Administration to form the Office of

Defense and Civilian Mobilization. The name of the new office was changed on August 26, 1958, to the Office of Civil and Defense Mobilization.

One of the factors leading to the merger was a survey of the so-called "nonmilitary" defense functions of the Federal Government made at the direction of the Bureau of the Budget by a private management company, McKinsey & Co., Inc. The term "nonmilitary" has been used in the McKinsey report, in numerous other reports, and in testimony before the Congress in such a broad sense as to include all mobilization aspects that are not strictly military. Thus, "nonmilitary" has been used to include functions of ODM now absorbed in OCDM that are defense supporting, such as those that relate to fulfilling military requirements from general production, allocating materials, establishing priorities, making defense loans, permitting and supervising voluntary agreements, maintaining the national stockpile, and coordinating all of the mobilization activities of the Government.

The view was expressed in the McKinsey report that most programs for defense-supporting operations should be conducted through Presidential delegation of authority to existing Government agencies. The report envisioned a single new agency charged with (1) overall planning, (2) administration and coordination; and (3) public information, education, and training programs.

The management firm found that recent rapid developments in military technology had so affected the scope of both civil defense and defense mobilization functions that they were no longer separable. It was concluded that no effective division could be made of defense mobilization and civil defense for organizational purposes on the basis of—

(*a*) Time phases which include long-range recovery or rehabilitation and post attack survival.

(*b*) Geographical areas, such as damaged or undamaged areas.

(*c*) Subject or item, such as survival items (e. g., food, sanitation, medical supplies, shelter) and recovery items (e. g., building materials).

(*d*) Types of wartime assumptions such as limited war, world war without nuclear attack on the continental United States, or worldwide nuclear war.

Another finding of the McKinsey firm was that the role played by existing departments and agencies in carrying out defense planning functions is so important that it should be clarified and expanded. The report stressed the lack of a time element in event of an attack and the need for plans based on established relationships between Federal, State, and local governments. It also stressed the need for reliance upon the present capabilities, resources and technical knowledge of Government agencies at all levels.

On April 24, 1958, the President transmitted to the Senate and the House of Representatives Reorganization Plan No. 1 of 1958. The plan was submitted in accordance with section 6 (a) of the Reorganization Act of 1949, as amended, which permits the President to reorganize the executive branch of the Government with the effect of statutory enactment unless Congress disapproves the proposed reorganization within 60 legislative days after it is submitted. The

effective date of the plan was July 1, 1958. No opposition was voted by Congress, and the plan became law.

In submitting Reorganization Plan No. 1 of 1958, the President stated that he had the benefit of several studies made by the executive branch as well as those conducted by the Congress. He expressed the belief that the reorganization plan will overcome the major difficulties revealed by those studies and mentioned in the 1959 budget message when he made the following statement:

> The structure of Federal organization for the planning, coordination, and conduct of nonmilitary defense programs has been reviewed, and I have concluded that the existing statutes assigning responsibilities for the central coordination and direction of these programs are out of date. The rapid technical advances of military science have led to a serious overlap among agencies carrying on these leadership and planning functions. Because the situation will continue to change and because these functions transcend the responsibility of any single department or agency, I have concluded that they should be vested in no one short of the President.

The plan transferred to the President all functions vested by law in the Director of ODM and the Office of Defense Mobilization as well as those vested in both the Administrator of FCDA and the Federal Civil Defense Administration. It empowered the President to delegate any of these functions and powers to any officer, agency, or employee of the executive branch of the Government, and to authorize the redelegation of any of such functions delegated to him. The Office of Defense Mobilization and the Federal Civil Defense Administration were consolidated to form a new agency officially known at first as the Office of Defense and Civilian Mobilization but subsequently changed to the Office of Civil and Defense Mobilization. Provision was made for a Director of the new office, a Deputy Director, and three Assistant Directors, each to be appointed by the President with the advice and consent of the Senate. The plan also provided for the appointment of not in excess of 10 regional directors under classified civil service. The functions of the Director of ODM on the National Security Council were transferred to the Director of the new office. The Civil Defense Advisory Council, created under the Federal Civil Defense Act, was also transferred to the new office. Both ODM and FCDA were abolished. Records, personnel, and unexpended balances of both agencies became a part of the new office.

The reorganization plan clarified several legal and administrative difficulties that might have been encountered had the desired consolidation been established merely by Executive orders. The functions of ODM under the Defense Production Act were clearly established by delegation from the President, inasmuch as the Defense Production Act vested powers directly in the President with only a few exceptions, such as the dispersal amendment which gave coordinating powers over the dispersal program expressly to ODM. However, with respect to the Federal Civil Defense Act, while the Administrator was empowered to act subject to the direction of the President, there were several powers granted directly to him under the act. Under the reorganization plan the President has direct responsibility for both mobilization

and civil defense. This method of granting authority is similar to that which has previously existed for most preparedness measures authorized in the Defense Production Act.

In the previous annual report this committee pointed to the need for central direction in our preparedness efforts, and this is understood to be one of the principal objectives of the reorganization plan. Testimony before this committee has indicated a need for some corrective action in order to avoid duplication of effort.

For example, under Executive Order 10480 ODM had full authority over manpower, transport and production and FCDA had responsibilities relating to the same subjects in connection with protecting the population in the event of an attack on this country. Duplication of authority is understood to have been one of the reasons underlying the delegation from ODM to FCDA of responsibilities regarding urban vulnerability in connection with the dispersal of industry program in Defense Mobilization Order I–18 of January 11, 1955, issued on the same date that ODM announced a national dispersal of industry policy in Defense Mobilization Order I–19.

On July 1, 1958, the President issued Executive Order 10773 in which he delegated to the Director of the new Office, with power of redelegation by him, all functions transferred to the President by Reorganization Plan No. 1. All functions of the President which had been delegated or assigned previously to ODM or the Director of ODM and to FCDA or the Administrator of FCDA were, to the extent that those delegations or assignments were in effect on June 30, 1958, redelegated or reassigned to the Director of the Office of Defense and Civilian Mobilization (now OCDM). All applicable Executive orders previously issued respecting ODM and FCDA were appropriately amended and most of them were expressly named in the order of July 1, 1958.

The new Executive order established the Defense and Civilian Mobilization Board to be composed of the Director of the new Office as Chairman and the heads of such executive departments and agencies as may be designated, with their consent, from time to time by the Director. The Director was also empowered to establish subsidiary units of the Board from the department or agency heads and to designate unit chairmen. The function of the Board is to advise the Director with respect to such matters relating to his responsibilities as he shall request.

The Director of the new Office was authorized to issue such regulations as he may deem necessary to carry out the purposes of the order of the President. In this connection, the President's message accompanying Reorganization Plan No. 1 and testimony given in congressional committees by Government officials indicate that revised delegations of responsibilities to existing departments and agencies will be made through Presidential action.

The President appointed Leo A. Hoegh, the Administrator of FCDA at the time of the merger, as Acting Director of the new Office, This nomination as Director was sent to the Senate on July 1, 1958, and he was confirmed.

In addition to the above-given general references to all functions of ODM and FCDA being transferred to the President and delegated

by him to the Director of ODCM, the following specific résumé of functions transferred illustrates the comprehensive nature of the merger:

1. Functions of the Director of ODM relating to stockpiling of strategic and critical materials (50 U. S. C. 98–98h; 15 U. S. C. 714b (h); 40 U. S. C. 485 (f)). These functions were transferred from the Munitions Board by Reorganization Plan No. 3 of 1953.

2. Functions of the Director of the Office of Defense Mobilization under the National Security Act of 1947, as amended (50 U. S. C. 404), with respect to advising the President concerning the coordination of various aspects of military, industrial, and civilian mobilization.

3. Functions of the Director of the Office of Defense Mobilization under section 2, as amended, of the trade agreements extension statute of July 1, 1954 (19 U. S. C. 1352a (b)). Whenever the Director has reason to believe that any article is being imported into the United States in such quantities as to threaten or impair the national security, he is required, under this statute, to so advise the President.

4. The function of the Office of Defense Mobilization under section 2 of the Defense Production Act of 1950, as amended (50 U. S. C. App. 2062), of coordinating the activities of departments and agencies of the executive branch with respect to the application of the principle of the geographical dispersal of certain facilities in the interest of national defense.

5. All functions vested in the Federal Civil Defense Administrator or the Federal Civil Defense Administration by the Federal Civil Defense Act of 1950, as amended (50 U. S. C. App. 2251 et seq.).

6. The functions of the Federal Civil Defense Administrator under section 9 of the Federal-Aid Highway Act of 1954 (23 U. S. C. 6a–2) with respect to consulting with the Secretary of Commerce relative to the civil defense aspects of highways constructed or reconstructed with the aid of Federal funds.

7. The functions of the Federal Civil Defense Administrator under section 203 of the Federal Property and Administrative Services Act of 1949, as amended (40 U. S. C. 484), relative to making surplus property available to States for civil defense purposes.

8. The function of the Federal Civil Defense Administration under section 3 of the act of July 3, 1952 (42 U. S. C. 1953), of cooperating with the Secretary of the Interior in relation to research on sea and saline waters.

9. The functions of the Federal Civil Defense Administrator in connection with the "civil defense procurement fund" provided for in the Third Supplemental Appropriation Act, 1951 (50 U. S. C. App. 2264).

10. The duty of the Federal Civil Defense Administrator, or his designee, under section 43 of the act of August 10, 1956 (50 U. S. C. App. 2285), of coming into agreement with the Committees on Armed Services of the Senate and House of Representatives regarding certain real estate transactions involving more than $25,000 and reporting to the committees upon similar transactions involving more than $5,000 but not more than $25,000.

The reorganization plan affected several functions of ODM and FCDA which were administered by these agencies prior to July 1,

1958, on delegations or assignments from the President. Chief among these was the function of ODM to coordinate on behalf of the President all mobilization activities of the executive branch of the Government under Executive Order 10480. Among these were and now are (in the Director of OCDM) the many Presidential functions and powers under the Defense Production Act. Other Presidential functions delegated to ODM and affected by the reorganization plan include:

1. The utilization of certain foreign currencies, acquired under the Agricultural Trade Development and Assistance Act of 1954, for the purchase of strategic and critical materials (Executive Order 10560).

2. Functions under the Abaca Production Act of 1950 with respect to directing increases or reductions of acreage under cultivation to abaca (Executive Order 10539, as amended by Executive Order 10553).

3. The function, under the Federal Civil Defense Act of 1950, as amended, of establishing standards and policies designed to promote the achievement of uniformity of planning for the continuity of essential Government functions (Executive Order 10346, as affected by Executive Order 10438 and Executive Order 10461).

4. The function of advising the President on the assignment of radio frequencies to Government agencies under the provisions of section 305 of the Communications Act of 1934, as amended, and of approving interim assignments of such frequencies (Executive Order 10460, as affected by Executive Order 10461; Executive Order 10705).

5. Authority to concur in plans under section 305 of the Communications Act of 1934, as amended, designed to minimize the use of electromagnetic radiation of radio stations of Government agencies in the event of attack or imminent threat thereof as an aid to hostile aircraft, guided missiles, and other devices capable of direct attack upon the United States (Executive Order 10312, as affected by Executive Order 10438 and Executive Order 10461).

In addition, the Director of the Office of Defense Mobilization, by designation of the President, was the certifying authority for the purposes of, and within the meaning of, section 168 of the Internal Revenue Code. That section relates to the accelerated amortization of certain emergency facilities. These functions are now being handled by OCDM.

The principal Federal Civil Defense Administration function which is already vested in the President by statute, and is therefore not transferred by the reorganization plan, is the administration of the natural disaster program. This program is authorized by Public Law 875 of the 81st Congress. Responsibility to assist the President in administering Federal assistance to States and cities was vested in the Federal Civil Defense Administrator by Executive Order 10427, which was continued by Executive Order 10773 to apply to the Director of the new Office.

On August 26, 1958, Public Law 85–763 was signed by the President, which officially changed the name of the then Office of Defense and Civilian Mobilization to the Office of Civil and Defense Mobilization. This was predicated to a large extent on the belief that the work of that Office would be confused with that of the Department of Defense. It was brought out also that the importance of civil defense should not be deemphasized.

When the bill to change the name (S. 4059) came up on the floor of the Senate the chairman did not object to it, but made a statement which in the legislative history of this matter is pertinent. The statement follows:

> S. 4059 would change the title of the Office of Defense and Civilian Mobilization to the Office of Civil and Defense Mobilization.
>
> The report accompanying this bill, Senate Report No. 2012, gives two reasons for this change in title. First, that the expression of "Office of Defense" might confuse this agency with the Department of Defense; and, second, because the absence of the words "civil defense" might destroy the identity of the present civil-defense program.
>
> The letters supporting the amendment which are printed in the report lay stress on the importance of preserving the identity of the civil-defense program.
>
> These objectives are good. It would be unfortunate for anyone to confuse the new organization with the Department of Defense, but it is also good to avoid destroying the identity of the present civil-defense program. Certainly the reorganization plan is intended to assist that program rather than to interfere with it.
>
> I should like, however, to point out that the civil-defense program is not the only program handled by the new agency. In addition to the civil-defense program, the agency is responsible under Reorganization Plan No. 1 of 1958 and Executive Order 10773 for activities under the Defense Production Act (including allocations, financial aids to industry to increase productive capacity and supply, and voluntary agreement programs); the Strategic and Critical Materials Stockpiling Act, the National Security Act of 1947, the Trade Agreements Extension Act, and a few more statutes. These important programs are still in operation though not so extensively as during the Korean war.
>
> These statutes are important to the security of the United States. Functions and projects under these other statutes must be carried out just as vigorously as the civil-defense program. The new agency must not be so concerned over preventing the loss of identity of the present civil-defense program that the other vital mobilization programs for which the agency is responsible are overlooked or their importance minimized (Congressional Record, August 4, 1958, p. 14618).

Civil Defense

At the public hearing of this committee, July 10, 1958, the chairman observed that since 1951 more than $446 million had been appropriated to the Federal Civil Defense Administration and about $14,500,000 to the Office of Defense Mobilization. This does not include appropriations for the current fiscal year ending June 30, 1959.

Inasmuch as the functions of ODM and FCDA were combined effective July 1, 1958, under Reorganization Plan No. 1, into a single

office dealing with civil and defense mobilization, the chairman directed the staff of this committee to inquire into and report on the nature of expenditures under the $446 million in funds previously appropriated to FCDA.

It will be noted from the following chart of these expenditures that the entire civil-defense program for the years 1951–58, inclusive, is separated into six categories which will be discussed separately.

Appropriation to Federal Civil Defense Administration—fiscal years 1951 through 1958

	Operations	Emergency supplies and equipment	Federal contributions	Research and development	Civil defense functions of Federal agencies	Civil defense procurement fund	Total
1951	$1,750,000		$25,000,000			$5,000,000	$31,750,000
1952	11,560,000	$56,000,000	7,750,000				75,310,000
1953	8,000,000	20,000,000	15,000,000				43,000,000
1954	8,525,000	27,500,000	10,500,000				46,525,000
1955	10,025,000	26,000,000	12,000,000				48,025,000
1956	12,125,000	32,650,000	12,400,000	$10,000,000	$1,500,000		68,675,000
1957	15,560,000	47,000,000	17,000,000	10,000,000	4,000,000		93,560,000
1958	17,000,000	3,300,000	17,000,000	2,000,000			39,300,000
Total	84,545,000	212,450,000	116,650,000	22,000,000	5,500,000	5,000,000	446,145,000

NOTE.—The above appropriations did not include funds for carrying out any of the civil defense responsibilities assigned to the Federal Government by H. R. 7576 or for conducting further shelter research and education measures as contemplated by the new national shelter policy.

SUMMARY OF FCDA HISTORY

The principal categories of the fiscal and operational review of the Federal Civil Defense Administration for the years 1951–58 were operations, emergency supplies and equipment, Federal contributions, research and development, and Federal agency functions (delegations).

The operations review deals with the preparation and administration of the Nation's overall civil defense program, including the development and modification of plans to protect life and property under conditions of nuclear attack and the providing of services essential to survival and recovery. Basic concepts, policies, and techniques of civil defense underwent frequent revamping by FCDA during these years. Total appropriation: $84,545,000.

Emergency supplies and equipment, representing the largest outlay of FCDA funds, included as its chief item the stockpiling of medical supplies and equipment, in strategic locations, for use immediately after an enemy attack. Also stockpiled were radiological and chemical warfare defense equipment, and engineering supplies. Total appropriation: $212,450,000.

Federal contributions is the program under which FCDA helped States and their political subdivisions, through fund-matching, to acquire civil defense materials and equipment which met standards established by FCDA, and to carry on civil defense education and training. Total appropriation: $116,650,000.

Research and development, as conducted by FCDA, included participation in the continental nuclear test weapons program; radiological defense research; development and refinement of a bomb damage assessment system; investigation of warning, alerting, and com-

munications system; and research on biomedical problems, biological and chemical warfare defense, training programs, and the effects of disaster on our organized society. FCDA carried on the research program through arrangements with other Federal agencies and by contracts with specialized research organizations and universities. Total appropriation: $22 million (fiscal years 1956 through 1958).

Federal agency functions (delegations) deal with civil defense activities of the several departments and agencies to which FCDA delegated appropriate responsibilities for the purpose of supporting civil defense with the strength and resources of the Federal Government except that essential to military defense. Designated agencies were provided with basic assumptions and standards by FCDA, and each was made responsible for coordination with other agencies having civil defense assignments. Total appropriation: $5,500,000 (for fiscal years 1956 and 1957 only).

OPERATIONS

In the 8-year period (fiscal years 1951 through 1958) total appropriations of $84.5 million were authorized for the administration and operation of Federal civil defense programs. Of the total appropriated, $82.8 million was expended or obligated through the fiscal year 1958. These expenditures were incurred in the preparation and administration of civil defense programs to protect life and property from the effects of a nuclear attack, to provide emergency services to the population, and to provide for restoration of vital facilities, utilities, and systems in damaged areas. The various programs have been grouped into 9 major categories as follows:

Executive direction	$2,774,944
Planning and intelligence	2,050,987
Research and development	10,553,295
Warning and operations plans	20,448,319
Resources and requirements	641,539
Education and training	16,859,956
Specialized liaison	493,198
General administration and stockpile operations	15,205,745
Field operations	13,739,446
Total expenditures	82,770,429
Transfers and unobligated balance	1,774,571
Total appropriations	84,545,000

An analysis of the total $82.8 million operational cost indicates that salaries amounting to $43.6 million made up more than half of the 8-year total obligations incurred. At the end of fiscal year 1958, the total number of employees engaged in all program activities was about 1,460 as compared to a yearly average of 884 for the 8-year period. A further breakdown of the overall operational cost follows:

Salaries	$43,601,400
Travel	3,542,200
Communication services	8,482,600
Printing and reproduction	3,797,900
Other contractual services	9,193,100
Services performed by other agencies	6,613,100
Supplies and materials	1,257,400
Equipment	2,817,000
All other operational expense	3,465,800
Total expenditures	82,770,500

The combined amount of $15.8 million incurred for "other contractual services" and "services performed by other agencies" included approximately $4.3 million for research and development projects entered into prior to the fiscal year 1956. Among others, these projects included studies of underground facilities and alterations and construction designs to improve building protection. Contractual services incurred also included radio and television agreements, Red Cross contracts, warehouse space, and maintenance costs for years prior to 1956.

Executive direction

(Total expenditures: $2,777,944)

This portion of operations expenditures for the 8-year period included funds to finance activities of the Administrator and his staff, the offices for inspection, congressional liaison and State relations, and the General Counsel.

Planning and intelligence

(Total expenditures: $2,050,987)

Planning assumptions based on the several developmental phases of nuclear war have formed the background for practically all the civil defense planning in the different areas. These assumptions provide the basis on which Federal, State, and local civil defense authorities can develop plans and set priorities of action. In line with the destructive power of nuclear weapons, the "aiming area concept" was developed by FCDA during 1957 as a more realistic basis for planning nonmilitary defense measures. This concept recognizes the fact that the United States contains multiple potential targets, and defines an "aiming area" as a geographic area in which an enemy would probably place one or more nuclear weapons to assure the destruction of the target. Enemy weapons capabilities are said to have been evaluated for the development of long-range civil defense planning. Under the basic planning premises it is accepted that the U. S. S. R. has the capability of attacking any target within the United States or its possessions with nuclear weapons delivered by piloted aircraft, submarine-launched missiles, and by clandestine means. It is also assumed that the U. S. S. R. can wage biological or chemical warfare on this country.

Research and development

(Total expenditures: $10,553,295)

The research program is carried out primarily through contractual arrangement with other Federal agencies, universities, and industry. Sixteen research projects were completed during the fiscal year 1957. Twenty-three other research projects were in process at the end of that fiscal year. The areas covered by these projects included warning and communications, radiological defense, shelter design and testing, health and medical, and damage assessment. The funds included in the operations budget covered only the administration and supervision of these projects, as the actual research contracts were financed under the "Research and development" appropriation.

Warning and operations plans

(Total expenditures: $20,448,319)

An adequate system to warn the population of an impending attack has been a major project of FCDA from the start. A nationwide attack warning system extending from the Air Force control centers to State and local control points has now been provided. This national warning system (NAWAS) was placed in operation on May 1, 1957, making it possible to provide warning to 199 points virtually simultaneously. Warnings are relayed from these 199 points to more than 3,500 secondary points. FCDA has the responsibility of determining the warning functions to be delegated to Federal agencies and to coordinate the programs. It is expected that the warning system will be extended to a nationwide network of radio stations in the near future. A national communications system is now in operation which serves national headquarters, regional headquarters, 48 State control centers, and the District of Columbia. This system contains about 20,000 miles of leased wire facilities and has the capability of either voice or teletypewriter operation.

Resources and requirements

(Total expenditure: $641,539)

Expenditures under this group classification involved the operational plans developed for the management of postattack resources, including manpower, food, water, medicine, transportation, communications, and essential physical facilities. On July 26, 1956, FCDA created an economic requirements service to insure meeting essential civilian requirements; to reestablish and maintain the physical facilities essential to the economy; and to insure the conservation, distribution, and use of vital resources in the event of an attack. Plans were also developed to assure that the facilities and resources of Federal agencies, national relief organizations, and State and local governments are properly utilized.

Education and training

(Total expenditures: $16,859,956)

FCDA has operated a staff college in Battle Creek, Mich., and a rescue school at Olney, Md., since early 1951. In these centers, civil defense training was carried on under the Federal Civil Defense Act, which authorized FCDA to "conduct or arrange, by contract or otherwise, for training programs for the instruction of civil defense officials and other persons in the organization, operation, and techniques of civil defense; conduct or operate schools or classes * * *, and provide instructors and training aids as deemed necessary." The training programs included courses in technical specialties designed to train instructors capable of teaching similar courses at the Federal, State, and local levels. In addition, FCDA traveling teams gave special courses to groups in response to requests from the States. About 15,000 people completed one or more of the civil-defense courses. A vast majority of the students were State and local administrators of civil defense. Many came from industry, labor, and organizations.

Of the total, nearly one-half attended the 1-to-2 week basic courses, while the others completed special courses and conferences, most of which lasted 2 or 3 days. The courses included (1) administration courses, primarily for key officials such as mayors, State, county and city civil defense directors, and chiefs of government services; (2) operations courses to indicate the scope and magnitude of the attack problems, develop capabilities in planning emergency operations, define methods of testing and rehearsing operational plans, outline emergency support resources available, and practice control-center procedures; and (3) courses on the principles of tactical evacuation to show how these may be adopted for specific problems in various communities.

In addition, special training in rescue technique and operations was given to over 2,400 persons at the FCDA rescue school at Olney, Md., and by traveling teams of FCDA instructors. Other educational and training aids, including motion picture films, television shorts, and radio scripts were developed by FCDA for general distribution. These aids covered a wide variety of subjects, such as fallout, expected damage in the event of attack, shelter, survival operations, and evacuation. During the fiscal year 1957, 6 motion pictures, 10 training filmstrips, 140 network civil defense radio shows, 1 television program, and 15 "spot" announcements were produced. In accordance with the act authorizing the Administrator to "publicly disseminate appropriate civil defense information by all appropriate means," over 150 million copies of publications in the form of technical manuals, bulletins, guides, and handbooks on specific aspects of civil defense were distributed and sold. To provide continuity of public information in the event of attack, FCDA entered into an agreement with the various news services to plan emergency information procedures.

Specialized liaison

(Total expenditures: $493,198)

The expense incurred under this heading covered all types of educational and promotional activities carried out with special groups and organizations. Among such groups were the American Red Cross, Civil Defense Advisory Council, National Advisory Council on Rural Civil Defense, Civil Defense Coordinating Board, Civil Defense Scientific Advisory Committee, Labor Advisory Committee, National Women's Advisory Committee, church organizations, National Safety Council, United States Chamber of Commerce, American Society of Industrial Security, and the National Association of Manufacturers.

General administration and stockpile operations

(Total expenditures: $15,205,745)

This activity covered the administrative costs of stockpile management, including policy determination as to medical supplies, radiological defense items, engineering equipment, and components for defense emergency hospital units to be stockpiled.

Field operations

(Total expenditures: $13,739,446)

FCDA has operated seven field offices under authority of section 401 (c) of the Act, which provides that "the Federal Government shall provide necessary coordination and guidance" to the States, counties, and cities which have primary responsibility for civil defense. The regional administrators helped the States plan, organize, train, and operate their civil-defense systems. They were responsible also for integrating existing State systems into regional operating systems, which constitute national civil defense. In major natural disasters, regional administrators were delegated authority to direct and coordinate Federal assistance as set forth in Public Law 875. The regional administrators had final decision on civil-defense equipment and supplies for which Federal funds were made available on a matching basis.

EMERGENCY SUPPLIES AND EQUIPMENT

This category represents the largest outlay of FCDA funds, namely $212,450,000, for the 8-year period of 1951–58. Basic authority for the purchasing was given in the Federal Civil Defense Act (50 U. S. C. App. 2281 (h)) which authorized the Administrator (now the Director of the Office of Civil and Defense Mobilization) to "procure by condemnation or otherwise construct, lease, transport, store, maintain, renovate, or distribute materials and facilities for civil defense, with the right to take immediate possession thereof." A quarterly report to Congress of all purchasing is required under this act and the right of condemnation of land or rentals of land is restricted to valuations or annual rentals of less than $25,000 without the concurrence of the Armed Services Committees of Congress.

The basic formula with respect to purchasing and stockpiling as stated in budget estimates appears to be that material and equipment not normally available or not present in quantities needed to cope with conditions caused by enemy attack are stockpiled in strategic locations. From the start of the program to the present time medical supplies and equipment have accounted for most of the expenditures in this field. Approximately $200 million has been spent for medical supplies and equipment. This constitutes 94 percent of the total expenditures for emergency supplies and equipment. The remaining 6 percent has been spent for engineering supplies and equipment ($6.9 million), radiological and chemical warfare defense equipment ($9.1 million), and warehousing and maintenance of the stockpile ($8.2 million). The difference between the $212 million reported as appropriated and the total of $224 million in obligations is accounted for by transfers from other accounts and the lapse of unobligated balances.

Through fiscal 1958 approximately $219 million of supplies and equipment had been stockpiled in 43 warehouses. The locations and

valuations of materials in the FCDA stockpile at the close of the fiscal year 1957 were as follows:

Stockpiling costs, 1951–57

Total obligated (excluding transfers and returns to Treasury)	$213,360,000

Value of stockpile by location

Location	*Value*
Alaska	$52,300
Anniston, Ala	2,353,900
Atlanta, Ga	111,300
Bastrop, Tex	4,458,300
Bremen, Ind	7,011,200
Clearfield, Utah	6,083,600
Columbus, Ohio	1,532,200
Crab Orchard, Ill	3,358,500
Decatur, Ill	770,500
Ellenville, N. Y	3,842,700
Gilbertville, Mass	5,940,100
Granite City, Ill	480,600
Hampton, Iowa	3,825,800
Hawaii	259,000
Horseheads, N. Y	2,946,300
Jeffersonville, Ind	1,555,700
Lake Charles, La	4,620,300
Lathrop, Calif	5,219,000
Lebanon, Pa	3,132,400
Lexington, Ky	447,900
Marion, Ohio	3,097,200
Marshall, Mich	5,015,000
Mechanicsburgh, Pa	11,821,500
Mira Loma, Calif	2,828,200
Montoursville, Pa	1,909,900
Neosho, Mo	4,256,600
New Castle, Pa	6,175,900
New Cumberland, Pa	797,600
Puerto Rico	363,700
Richmond, Va	468,300
Rockwood, Tenn	2,700,300
Romulus, N. Y	7,996,200
San Jose, Calif	4,815,000
Seneca, Ill	5,169,100
Shamokin, Pa	3,498,500
Sidney, Nebr	3,026,800
Somerville, N. J	24,911,600
Spokane, Wash	1,537,900
Springfield, Mo	7,275,100
Stockton, Calif	2,179,100
Tacoma, Wash	341,300
Tobyhanna, Pa	524,400
Williamsburg, Va	5,046,100
Yakima, Wash	2,896,000
Zanesville, Ohio	3,495,800
Engineering stockpile (various locations)	6,210,000
Vaccines, antibiotics and blood derivatives in various manufacturers' storage locations	6,117,900
Radiological and chemical warfare equipment—	
On loan to States	362,100
On loan to foreign governments	800
On loan to other Federal agencies	48,500
Civil defense emergency hospitals—	
On loan to States	1,333,100
Prepositioned	7,128,800
On display at national headquarters	26,100
Test equipment at Robert A. Taft Engineering Center	84,300
Material at regional offices	122,500

Value of stockpile by location—Continued

Location	Value
Material at national headquarters	$81,400
Material at classified location	3,000
Material at staff college (Olney)	13,900
Medical material loaned to State	1,200
Radiological equipment grants to States	907,400
Radiological equipment transferred to other Federal agencies	342,100
Biological equipment transferred to Department of Agriculture	117,200
Disposition of deteriorated and unserviceable items	250,000
Delivery of material not included by warehouse in above listing	2,724,000
Subtotal	196,023,000
Undelivered orders	11,582,000
Warehousing costs (overhead and administration)	5,755,000
Total value of stockpile	213,360,000

Types of material procured for the stockpile

Medical supplies and equipment	$191,373,000
Engineering supplies and equipment	6,210,000
Radiological supplies and equipment	10,022,000
Subtotal	207,605,000
Overhead and administration of warehouse stockpile	5,755,000
Total	213,360,000

It will be noted from the yearly categorical chart of expenditures, heretofore shown, that the larger outlays for emergency supplies and equipment occurred in the years 1952 and 1957. Actual obligations incurred in 1955 amounted to $66.2 million. Of this amount, $10 million was transferred from the Federal contributions fund. The budget estimates for 1952 and 1953 called for medical supplies sufficient to provide for 1,800,000 casualties in 1952 and 2,700,000 casualties in 1953. Engineering supplies purchased during these 2 years for standby emergency use consisted primarily of portable water pipe, purifiers, and generators. Approximately 310 miles of pipe was purchased in 1952 and an additional quantity in 1953. Welfare supplies during these years consisted of feeding kitchens, mattress pads, and blankets, the goal for 1953 being enough to care for about 8 million homeless persons in addition to those cared for by existing local resources.

A breakdown of the actual expenditures in 1957 totaling $47,747,000 (listed at $47 million due to adjustments from other accounts), gives a fair indication by proportion of the nature of FCDA expenditures in the field of emergency supplies and equipment:

Program by activities, 1957, actual

1. Medical supplies and equipment:	
(*a*) Emergency hospitals	$20,325,606
(*b*) Medical and surgical	12,690,624
(*c*) Blood and shock therapy	7,477,541
(*d*) Other	67,016
Total medical supplies and equipment	40,560,787
2. Radiological and chemical warfare defense equipment	4,325,825
3. Warehousing and maintenance of stockpile	2,860,694
Total obligations	47,747,306

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The storage criteria of FCDA follow the lines of using from approximately 10,000 to 15,000 square feet of space in minor locations for storing prepositioned hospitals, medical supplies, and radiological instruments. For the support of one or more target areas, major locations of approximately 50,000 square feet are used. General reserve storage locations of from 100,000 to 500,000 square feet are used in support of wide geographical regions. Where possible, Government-owned and controlled installations are used.

At the end of the fiscal year 1957, FCDA had on hand in FCDA, State and local storage sites 900 civil-defense emergency hospital units and components for 1,032 units on order. The 200-bed emergency hospital unit was developed to fill an anticipated gap in hospital facilities in event of a nuclear attack. It weighs about 12 tons, consists of about 370 crates and packages, and may be transported in a van of 1,600-cubic-foot capacity. When it is set up, it requires about 15,000 square feet of space. The prepositioned units are stationed mainly at various schools, hospitals, and courthouses throughout the Nation. Medical supplies in storage at the end of the fiscal year 1957 included 9 million burn dressings, 2,500,000 blood-recipient sets, 1,500,000 units of blood derivatives, 4 million units of plasma expanders, 1,400 gas masks, 5,900,000 doses of atropine, 41,900,000 doses of vaccines and antitoxins, 1,500,000 paper blankets, 307,000 litters, 175,000 radiological dosimeters, and 96,000 radiological survey meters. The radiological instrument figures include those on loan or grants to States.

The 1958 budget request for FCDA emergency supplies and equipment was $75 million, of which Congress appropriated only $3,300,000. At the close of fiscal year 1957, medical supplies and equipment on hand, exclusive of emergency hospitals, were sufficient to care for 4,250,000 casualties for the first 3 postattack weeks.

FEDERAL CONTRIBUTIONS PROGRAM

Appropriations for Federal civil-defense contributions to States and cities during the 8 fiscal years 1951–58 totaled $116,650,000, of which $87,763,235 was obligated by June 30, 1958.

The purpose of the Federal contributions program was to help the States and their political subdivisions acquire essential civil-defense material and equipment and to help them promote civil-defense education and training. The program operated under authority of the Federal Civil Defense Act of 1950, which authorized the Administrator of FCDA to make financial contributions to the States for civil-defense purposes on the basis of programs and projects approved by the Administrator.

Federal contributions were made to the States on the basis of individual project applications submitted to and approved by FCDA regional administrators in accordance with uniform programs and standards established by the agency. The States were required to match Federal funds on a 50–50 basis.

Nearly 75 percent of the total Federal contributions went to the FCDA regions (1, 2, and 7) with heavy concentrations of populations. New York, California, and Pennsylvania were the States receiving the largest amounts of Federal funds.

During the early years of the program, most funds were obligated by FCDA for health and special-weapons defense items. Later, more

money was obligated for communications items. During the fiscal years 1952–58, the Federal contributions dollar was divided as follows: 35 cents for communications, 23 cents for health and special-weapons defense, 12 cents for warning systems, 10 cents for training education and public information, and 20 cents for all other programs.

Objectives of the contributions program included:

1. Encouragement of civil-defense preparedness in States and cities by providing funds, on a matching basis, for approvable projects.
2. Maintenance of a balance among programs by setting aside funds for priority programs.
3. Assistance to States in obtaining preparedness in persons trained and items of civil-defense equipment.
4. Improvement of standards for equipment best for the job; standardization of civil defense materials, facilities, and equipment to implement mutual-aid and mobile-support plans more effectively.
5. Practical cooperation between Federal Government and States in matters pertaining to civil defense.
6. Assistance to communities which otherwise could not afford needed programs.
7. Maintenance of good public relations between citizens and their Federal Government by helping them initiate their own civil-defense programs.
8. Better knowledge of preparedness in the States through analysis of civil-defense projects partly or wholly completed.

A breakdown of Federal contributions for the 8 years, together with typical items procured by States and localities providing matching funds, follows:

Attack warning, $10,357,224.—Items included sirens and bell-and-light installations for warning systems below the level of the Federal key-point warning centers. FCDA provided matching funds for the purchase or installation of State and local equipment, but not the operating expense.

Communications, $31,393,178.—Items included radio transmitter-receivers for base station, mobile and portable use in conjunction with such State communication facilities as police radio, teletype, telephone, and special systems. FCDA did not help pay operating expenses.

Medical supplies and equipment, $19,007,124.—Items included first-aid station systems, 200-bed emergency hospitals, blood-recipient sets, plasma and expanders, and dosimeters and survey meters for radiological defense.

Training and education, $8,796,611.—This included public civil-defense information and education through training courses, manuals and other publications, filmstrips and motion pictures, maps, and radio and television programs.

Public safety services, $13,375,538.—Items included pumpers, portable generators, portable pumps, and hose for fire service; badges, holsters, revolvers, and raincoats for police service; basic rescue kits, trucks, trailers, and tools for rescue service.

Mass-care equipment, $618,235.—Items included blankets, food and liquid carriers, portable stoves and burners, and stock pots.

Engineering supplies and equipment, $1,678,144.—Items included steel pipe and fittings, portable generators, portable pumps, water chlorinators, and water-purification units.

Construction and general equipment, $2,537,181.—Items included bulldozers and other machinery essential to restoration and repair of public facilities after an attack.

RESEARCH AND DEVELOPMENT

A total appropriation of $22 million is listed in the categorical chart for FCDA appropriations for the period 1951–58 in the field of research and development. More than this amount has been appropriated in this field, however, because it was not until 1956 that it became a separate appropriation item. Prior to that time, it was carried in the budget for operations. Part of the research was done then, as now, through or in cooperation with other agencies of the Government. It may be pointed out that FCDA, cooperating with the Atomic Energy Commission, has participated in every continental nuclear-test series since 1951.

Most of the FCDA research has been carried on under contract with various universities and specialized research organizations. The individual projects in process during the fiscal year 1956 varied in cost to FCDA from $9,850 to $300,000, and, when shared by other agencies, the total cost in some instances was paid by the agencies. A listing of these projects follows:

1. Scientific Advisory Committee (National Academy of Sciences).
2. Chemical Warfare Defense (Army Contract).
3. Civil Defense Atomic Test Programs (AEC).
4. Damage Assessment and Reporting (Stanford Research Institute).
5. Disaster Studies (National Research Council).
6. New England Disaster Study (Columbia University).
7. Fire Research Committee (National Academy of Sciences).
8. Climatological Survey (Department of Commerce).
9. Operational Communications (Stanford Research Institute).
10. Medical Research, Blood Research, Plasma Sterilization (Stanford Research Institute).
11. Public Attitude Survey (University of Michigan).
12. Shelter Research, Ionizing Radiation (Department of Commerce).
13. Shelter Design (American Machine & Foundry Co.).
14. Public Communications, Model Transistor Amplifiers, Portable Public Address System, Wire Line Control System (Dukane Corp.).
15. Home Warning Devices, Powerline Signal Systems (Midwest Research Institute).
16. Home Warning Devices, General (Armour Research Foundation).
17. Home Warning Devices, Prototype 2000 Cps. System (International Business Machines Corp.).
18. Home Warning Devices, Home-A-Lert System (Allis Chalmers Co.).
19. Home Warning Devices, Telephone Signaling System (Armour Research Foundation).
20. Home Warning Devices, Prototype CONELRAD Alert Receivers (Philco Corp.).
21. Warning and Communications Systems Studies, General (Melpar Corp.).

22. Warning and Communications Systems Studies, Warning Study by Specific States (Gautney & Jones Co.).
23. Radiological Defense System (University of California).
24. Public Education and Training, Local Civil Defense Organization Effectiveness (Michigan State University).
25. Public Education and Training, Local Civil Defense Training Effectiveness (Applied Psychological Services, Villanova, Pa.).
26. Public Education and Training, Effectiveness of Civil Defense Information Media (Group Attitudes, Inc., New York, N. Y.).

During the fiscal year ending June 30, 1957, sixteen research projects were completed. Nine of these were among those listed for the fiscal year 1956. Projects completed in 1957 and not listed for 1956 are as follows:

1. Airborne Radiation Study (AEC)
2. Attack Surveillance (Stanford Research Institute)
3. Anti-Blast Valve Closures (A. D. Little, Inc.)
4. Milwaukee Study—Shelter Needs (Wilbur Smith & Associates)
5. Milwaukee Study—Communications (University of Chicago)
6. Methods of Collecting Survival Plan Information (Public Information Service)
7. Command and Control and Training Studies (John Dubold & Associates [Griffenhagen])
8. Urban Population Studies Part VIII (Department of Commerce)

Research projects started in the fiscal year 1957 and pending at the close of that fiscal year are as follows:

1. Design and Testing of a Dual Purpose Shelter (Amman & Whitney)
2. Design and Testing of a Dome Type Shelter (American Machine & Foundry Co.)
3. Estimation of Fallout Casualties (Dr. Rudolph Langer)
4. Ionizing Radiation Study (National Bureau of Standards)
5. Study of the Diagnosis and Treatment of Radiation Injury (National Radiological Defense Laboratory)
6. Aerial Survey Instruments (AEC)
7. National Emergency Alarm Repeater (NEAR) System (Midwest Research Institute)
8. Internal Warning Devices (Armour Research Foundation)
9. Disaster Research Program (National Academy of Sciences)

As in all years since the inception of the civil defense program, FCDA in cooperation with the Atomic Energy Commission and the Department of Defense, continued its participation in 1957 and 1958 in the continental nuclear test program.

FCDA requested $6,700,000 for research and development in fiscal 1958 and $2 million was appropriated. The amount of $9,042,867 was carried over from the previous year, however. During the year a research and development program costing $9,542,867 was conducted. The specific items listed in the programs for the fiscal years 1956 and 1957 are generally indicative of the nature of, or categorical approach to, the program for the fiscal year 1958. They are also indicative of the same for the period 1951–55, wherein research and development was carried in the operations budget in the amount of $10,553,295. The budget categories for research and development during the fiscal year 1958, and continued into fiscal 1959, were as follows:

1. *Survival planning.*—This program calls for completion of the studies leading to the survival plans for the States and metropolitan areas. Plans for 45 States, including the principal metropolitan areas, are being developed.

2. *Overall research.*—This covers research and development of civil defense systems and equipment.

3. *Warning and communications.*—This program includes warning and communications equipment, including voice sound systems, home warning devices, and low frequency radio transmission.

4. *Radiological defense.*—The objective of this program is the development of a national radiological defense system which would include prediction, monitoring, shelter, countermeasures, reclamation procedures, and decontamination.

5. *Engineering and nuclear testing.*—Included in this program are development of shelter designs for blast and fallout protection and the field testing of prototype shelters.

6. *Health and medical.*—Research herein includes, among other things, studies of mass immunization techniques, decontamination and protection of food and water supplies, blast biological studies and shelter habitability studies.

7. *Damage assessment.*—This provides for participation in the national bomb damage assessment system.

NATIONAL SHELTER POLICY

The construction of a limited number of prototype shelters of various types for research and development was included in the national shelter policy announced by the Director of FCDA on May 7, 1958, as follows:

> In the event of nuclear attack on this country, fallout shelters offer the best single nonmilitary defense measure for the protection of the greatest number of our people. Furthermore, a nation with adequate fallout protection is a nation which would be more difficult to successfully attack. This fact alone would substantially lessen the temptation of an aggressor to launch an attack.
>
> The Administration's national civil-defense policy, which now includes planning for the movement of people from target areas if time permits, will now also include the use of shelters to provide protection from radioactive fallout.
>
> To implement this established policy, the Administration will undertake the following action:
>
> 1. The Administration will bring to every American all of the facts as to the possible effects of nuclear attack, and inform him of the steps which he and his State and local governments can take to minimize such effects.
>
> The present civil-defense programs for information and education will therefore be substantially expanded in order to acquaint the people with the fallout hazard and how to effectively overcome it. The public education program will include information on—
>
> (1) nuclear weapons effects on people, plants, and animals;

(2) the provision of effective fallout protection, how to construct a fallout shelter, and how to improvise effective shelter;

(3) necessary measures for the protection of food and water;

(4) how to carry out radiological decontamination; and

(5) what governments—Federal, State, and local—are themselves doing about fallout protection.

2. The Administration will initiate a survey of existing structures on a sampling basis, in order to assemble definite information on the capabilities of existing structures to provide fallout shelter, particularly in larger cities.

Many facilities, such as existing buildings, mines, subways, tunnels, cyclone cellars, etc., already afford some fallout protection. Action will be taken to accurately determine the protection afforded by all such facilities in order to make maximum use of them.

3. The Administration will accelerate research in order to show how fallout shelters may be incorporated in existing, as well as in new, buildings—whether in homes, other private buildings, or governmental structures. Designs of shelters will be perfected to assure the most economic and effective types.

4. The Administration will construct a limited number of prototype shelters of various kinds, suitable to different geographical and climatic areas. These will be tested by actual occupancy by differing numbers of people for realistic periods of time. They will also have practical peacetime uses.

Some of the prototype structures will be incorporated in—

(*a*) Underground parking garages;

(*b*) Understreet shelters;

(*c*) Subways;

(*d*) The Federal highway program—patrol and maintenance facilities;

(*e*) Additions to existing schools and new schools, including such facilities as cafeterias, assembly space, and classrooms;

(*f*) Additions to existing hospitals and new hospitals, including such facilities as cafeterias, visitors' and convalescent rooms, and reserve areas;

(*g*) Industrial plants;

(*h*) Commercial buildings;

(*i*) Family residences and apartments, including such facilities as bathrooms, garages, basements, and recreation rooms.

5. The Administration will provide leadership and example by incorporating fallout shelters in appropriate new Federal buildings hereafter designed for civilian use.

Federal example is an indispensable element to stimulate State, local government, and private investment for fallout shelters. Community use of the shelters in these new buildings is contemplated.

There will be no massive federally financed shelter construction program.

With reference to blast shelters there are still difficult questions, having to do with the amount of time that would be available to enter the shelters, the uncertainty of missile accuracy, and the effectiveness of our active defense. There is no assurance that even the deepest shelter would give protection to a sufficient number of people to justify the cost. In addition, there may not be sufficient warning time in view of the development of missile capabilities to permit the effective use of blast shelters.

Our chief deterrent to war will continue to be our active military capability. Our active military defense may eventually have the capability of effectively preventing an enemy from striking intended targets. Highest priority is to be given to the development of this capability.

FEDERAL AGENCY FUNCTIONS (DELEGATIONS)

The Administrator of the Federal Civil Defense Administration was authorized by the Federal Civil Defense Act of 1950 to—

> delegate, with the approval of the President, to the several departments and agencies of the Federal Government appropriate civil-defense responsibilities, and review and coordinate the civil-defense activities of the departments and agencies with each other and with the activities of the States and neighboring countries.

During the fiscal years 1951 through 1955, and in 1958, delegated civil-defense responsibilities were carried on through use of their own funds by the Department of Agriculture; Department of Commerce; Department of Health, Education, and Welfare; Department of the Interior; Department of Justice; Department of Labor; and the Housing and Home Finance Agency.

In fiscal years 1956 and 1957, however, delegated civil-defense functions were carried out with FCDA funds transferred to departments and agencies, as shown in the following table:

	1956	1957	Total
Housing and Home Finance Agency	$25,000	$59,808	$84,808
Department of Commerce	163,813	368,292	532,105
Department of the Interior	10,328	49,669	59,997
Department of Health, Education, and Welfare	1,214,722	2,021,609	3,236,331
Department of Labor	64,252	373,984	438,236
Department of Agriculture		257,670	257,670
Department of Justice		59,745	59,745
Subtotal, obligations	1,478,115	3,190,777	4,668,892
Transfer from other accounts	−40,000		−40,000
Unobligated balance, lapse	+61,885	+727,554	+789,439
Comparative transfer to other accounts		+81,669	+81,669
Total	1,500,000	4,000,000	5,500,000

Use of Federal resources

Three sections of the Federal Civil Defense Act authorized FCDA (now OCDM) use of Federal resources, making it possible to bolster

civil defense with all the strength of the Federal Government except that which is more necessary for military defense.

One section empowered the Administrator to delegate, with the approval of the President, "appropriate civil-defense responsibilities" to the several Federal departments and agencies. The second directed the Administrator to "utilize to the maximum extent the existing facilities and resources of the Federal Government." The third, operative only during a civil-defense emergency, authorized the President, after taking into consideration Department of Defense requirements to direct Federal agencies to provide "their personnel, materials, and facilities to the Administrator for the aid of the States."

FCDA, required by the act to avoid duplicating any existing Federal activity, utilized Federal agencies and their resources in five ways: (1) By delegation of authority and responsibility; (2) by participation under statutory authority or agreement; (3) by planning continuity of essential Government functions; (4) by use of resources; and (5) by protection of Federal resources.

Interagency cooperation

Executive Order 10346, which was issued in April 1952, provided for intensified Federal interagency cooperation in a civil-defense emergency. This order directed planning by each Federal department and agency, in consultation with FCDA, and consistent with military requirements and the continuity of its own essential functions, for the use of its personnel, materials, and facilities in civil defense.

Delegations to agencies

Beginning in 1954 the Administrator of FCDA, with the approval of the President, issued 5 delegations covering 7 agencies, as follows: Delegation No. 1, approved July 14, 1954, delegated to the Secretary of Health, Education, and Welfare duties dealing principally with health and welfare problems under attack conditions, development of civil-defense training materials for schools and colleges, and the development of shelter and protective measures for educational institutions, hospitals, and other health facilities.

Delegation No. 2, approved September 8, 1954, assigned duties to several agencies. The Secretary of Agriculture was delegated responsibilities dealing with control or eradication of diseases, pests, or chemical agents used in biological or chemical warfare against animals or crops; the planning of emergency food supplies; and the prevention and control of fires caused by enemy attack in rural areas.

The Secretary of Commerce was delegated responsibility for the coordination of interstate and State-designated civil-defense highway systems; emergency clearance and restoration of highways, streets, and bridges in damaged areas; emergency traffic-control problems; and assistance to the States in analyzing potential target and support areas.

The Secretary of Labor was delegated responsibilities for planning emergency use of the labor force, coordination of Employment Service offices for determining manpower requirements and for recruiting purposes, developing methods of compensation of authorized workers in an emergency, providing compensation for the injury or death of authorized workers during an emergency, and a plan for providing temporary aid to workers during periods of idleness resulting from enemy action.

The Attorney General was delegated responsibility for guiding States in the protection of penal institutions and the control and utilization of prisoners and facilities during an emergency.

The responsibilities of the Administrator of the Housing and Home Finance Agency included the development of protective standards for new housing and temporary shelter in existing housing, provision of temporary emergency housing in support of attacked areas, and plans for emergency restoration of housing and community facilities under the Agency jurisdiction.

Delegation No. 3, approved August 13, 1955, gave the Secretary of Commerce further responsibilties; namely, to plan for needed highway improvements to meet civil-defense requirements and to develop and issue improved forecasts of radiological fallout patterns. Also, this delegation gave the Secretary of the Interior responsibility for planning and providing adequate fuel supplies for attacked areas and reception centers.

Delegation No. 4, approved November 22, 1955, gave the Secretary of the Interior responsibility for emergency restoration of electric-utility service to attacked areas and for providing adequate electric-utility service to support areas.

Delegation No. 5, approved September 1, 1956, delegated to the Secretary of Health, Education, and Welfare the additional responsibilities for the conduct of a program of donation of surplus personal property of the Federal Government for civil-defense purposes, including research.

Terms of delegations

Under the terms of the delegations of authority, the Administrator provided the designated agencies with basic assumptions and standards, and reviewed and coordinated their activities.

Each of the agencies was made responsible for coordination with other Federal agencies concerned, for making reports required by the FCDA Administrator, for considering mobilization assignments given by the Office of Defense Mobilization, and for requesting appropriations required, after consultation with the Administrator.

Delegations did not change the basic responsibility of FCDA to the President and the Congress, or the relationship between FCDA and the States. The States retained the prime responsibility for civil defense.

Civil Defense Coordinating Board

An Executive order of May 1955 established the Civil Defense Coordinating Board to facilitate participation by Federal departments and agencies in civil defense. Members of the Board represented each agency with assigned delegations, and other agencies with certain responsibilities in civil defense. It was the duty of the Coordinating Board to make recommendations to the President and to advise him of the progress achieved.

The Coordinating Board included the Administrator of FCDA as chairman and 17 other members representing each of the following: The heads of the 10 executive departments, the Chairman of the Atomic Energy Commission, the Chairman of the Federal Power Commission, the Director of the Office of Defense Mobilization, the Director of the Bureau of the Budget, the Administrator of the Hous-

ing and Home Finance Agency, the Administrator of the General Services Administration, and the Administrator of the Veterans Administration.

The Board also had an Executive Secretary, with members of the Secretariat serving the Board and representing the separate FCDA services in dealing with the delegate Federal departments and agencies. The Secretariat also coordinated the work of specialists at FCDA national headquarters and their counterparts in other Federal organizations.

(On July 1, 1958, the functions of the Board were absorbed by the Defense and Civilian Mobilization Board.)

Office of Intergovernment Organization

An Office of Intergovernment Organization was established at FCDA national headquarters in October 1955 to develop and review delegations to Federal departments and agencies, and to plan and review activities of the Secretariat for the Civil Defense Coordinating Board. The Director of the Office reported to the general counsel of FCDA.

Pending delegations

Delegations of civil-defense responsibilities to the Army Corps of Engineers and the Post Office Department were pending at the time of the merger of FCDA and the Office of Defense Mobilization on July 1, 1958, and were likely to be issued by the Director of the newly formed Office of Civil and Defense Mobilization.

CIVIL-DEFENSE PROCUREMENT FUND

A fund of $5 million was provided by Congress in 1951 for civil-defense procurement. This was in addition to the amount appropriated for emergency supplies and equipment. In the Federal-State matching program, many items were purchased on a 50-percent matching basis, being procured by the Federal Government at the request of the States so that they could take advantage of speedier deliveries and lower costs achieved by standardization and by volume buying.

The purpose of the $5 million fund was to afford a constant fund from which payments to contractors could be made in time to allow the Federal Government, the States, and the Territories and possessions to realize discounts of one-half of 1 percent on purchases of civil-defense materials. The fund was reimbursed for purchases from the Federal contributions appropriation and from funds provided by the States (65 Stat. 61).

During the fiscal year ending June 30, 1958, $3.5 million of this principal, no longer required for operations, was returned to the Treasury.

NATURAL DISASTERS

The Federal Disaster Act of 1950 (Public Law 875, 85th Cong., 2d sess.) provides for a continuing and orderly means of assistance by the Federal Government to States and local governments in major disasters. Federal assistance is intended to supplement the State and local efforts—not to supplant them. The law provides that the President shall determine whether a disaster is a "major disaster."

Amendments have been made to Public Law 875 permitting ex-

traordinary credit facilities in regard to home-mortgage loans and authorizing temporary housing or other emergency shelter for families affected by major disasters. Another amendment liberalizes, for disaster purposes, provisions governing donation or loan of Federal surplus property to States.

By Executive Order 10427, dated January 16, 1953, the President conferred upon FCDA (now OCDM) authority to direct and coordinate Federal assistance in major natural disasters. FCDA delegated to regional administrators certain investigative and operations functions, requiring that they give maximum consideration to the existing responsibilities, authorities, practices, customs, and arrangements of other Federal agencies, States, local governments, and the American National Red Cross with respect to natural disasters. Among other operations, the law requires emergency restoration of essential public facilities.

OCDM has responsibilities, first, in helping the President determine whether or not a disaster should be declared major. Floods, droughts, fires, hurricanes, earthquakes, storms, or other catastrophes are within the language of the law as to what constitutes disasters.

Under delegations from the President, OCDM may coordinate the activities of other Federal agencies and may direct other agencies to provide assistance in a major disaster. Reimbursement for assistance directed by FCDA may be made from the Federal disaster fund after a declaration by the President that a "major disaster" exists, if the President determines that such reimbursement is warranted.

By the end of the fiscal year 1956, Congress had appropriated more than $84 million for Federal disaster assistance, and the President had authorized a net allocation of more than $64 million in disaster funds. Since that time, Congress has appropriated $31 million, bringing the total disaster fund appropriation to $115 million since the start of the program. At the beginning of the fiscal year 1959, the fund had a total balance of $27,284,000, and $18,122,000 of this amount was unobligated.

CURRENT STATUS OF THE CIVIL-DEFENSE PROGRAM

In the budget for the fiscal year ending June 30, 1959, FCDA requested $41,800,000. Congress appropriated $38,500,000. The reductions made by Congress were $900,000 for operations and $2,400,000 for research and development. The amount of $18 million was appropriated in the regular bill for fiscal 1959 and $2 million added to this in the supplemental appropriation, making a total of $20 million for the current fiscal year available from appropriated funds for emergency supplies and equipment. FCDA plans for the year called for a suspension of procurement of new items pending the development of an integrated resource plan covering all essential civilian survival needs.

Activities in the supplies and equipment field are currently directed primarily toward the reprocessing of overage blood plasma procured in prior years, and an accelerated program to preposition emergency hospitals procured through 1957. Research is being conducted for alternative and less expensive methods of reprocessing blood plasma. A factor in maintaining the blood plasma, in addition to its security

value, is that it is the result of individual voluntary contributions of donors.

The $5,767,241 expended in 1957 for survival planning alone in the field of research and development (wherein $10 million was spent) is in excess of the $2 million appropriated for the entire research and development program for the current fiscal year. There is a carryover of $1.5 million to the current year from fiscal 1958, making approximately $3.5 million available for research and development. More than $6 million in applications for research and development contracts are on hand in OCDM. These vary in nature. Some are for engineering regarding dome and arch structure to withstand blast and attack incidentals. Some are for shelter entranceways and for combination sewer and shelter projects for large metropolitan areas. Others are for climatological surveys, attack surveillance, airborne radiation studies, audio sound systems and communications improvements, urban population studies, and a multitude of related civil-defense subjects. The estimated cost of the survey being conducted with respect to survival items is $100,000. This survey is being conducted by the Department of Commerce to assess the availability of production for survival items.

No estimate has been given for research or surveys in the economic field, as to the effect of nuclear attack on our economic structure, and the promulgation of coordinated plans to withstand attack and maintain economic order thereafter. This item is currently in the OCDM research agenda. ODM did considerable planning in this field in the past.

Congress denied the $9,150,000 requested by ODCM (now OCDM) for research and development in the 1959 supplemental request made in the closing days of the 85th Congress. This included experimental and exhibition shelters to further the previously announced national shelter policy.

The current status and outlook in the field of Federal contributions is that $17 million was appropriated in the regular 1958 appropriation to remain available until June 30, 1959. A request for $9 million in the supplemental bill for 1959 was denied. Moreover, a request to use $3 million of the $17 million fund for personnel and administrative costs under the new law (Public Law 85–606) was denied. H. R. 7576, now Public Law 85–606, approved August 11, 1958, makes civil defense the joint responsibility of the Federal, State, and local governments. Prior to August 11, 1958, the Civil Defense Act of 1950, as amended, could be interpreted as recognizing the need for Federal guidance and coordination, but placing the fundamental responsibility for civil defense on State and local governments. The policy statement in the law, until amended by H. R. 7576, stated that primary responsibility was vested in the States and their political subdivisions. Now, for the first time, the Federal Government may make grants of radiological instruments, detection devices, protective masks, gas-detection kits, and similar equipment to the States. Also, for the first time, the Federal Government has the authority to assist the States and local governments with their civil-defense personnel and administrative costs.

In testifying before this committee on July 10, 1958, the Director of the Office of Defense and Civilian Mobilization stated that he esti-

mated that H. R. 7576 would require appropriations of $284 million over a 5-year period. The 85th Congress denied his first request in this direction.

Meanwhile, however, $2,500,000 is available for operations and administrative costs in the current year, in addition to $18,500,000 appropriated in the regular bill for fiscal 1959. Thus, for the details of reorganization incident to the merger of ODM and FCDA and other operational purposes during fiscal 1959, OCDM has a total of $23,285,000 available. This includes the $2,285,000 appropriated to ODM, which is an increase of $71,000 over the appropriation for the fiscal year 1958. OCDM's total appropriations for fiscal 1959 are $45,285,000, with an additional $17 million carryover from fiscal 1958 for Federal contributions.

Defense Production Act Expansion Programs and Other Related Procurement Programs

During the past year, material expansion programs under the Defense Production Act have continued at a declining rate. The objective of these expansion programs has been to assure the availability of adequate supplies of strategic and critical materials to meet the foreseeable defense needs. This objective is virtually achieved for all materials except a relatively few items.

The DPA expansion programs have borne a close relationship to other defense-material programs. They have provided broad authority for the expansion of productive capacity, including contractual commitments to purchase metals, minerals, and other materials, and have made available large quantities of materials for retention in the stockpile and for resale to industry.

Congress has enacted several laws under which Federal agencies are authorized to acquire defense materials for the national stockpile and other Government inventories. In addition to the Defense Production Act of 1950, as amended, such statutes include the Strategic and Critical Materials Stockpiling Act of 1946 (Public Law 520, 79th Cong.), as amended by Reorganization Plan No. 3, effective June 12, 1953; the Domestic Minerals Program Extension Act of 1953 (Public Law 206, 83d Cong.); the Domestic Tungsten, Asbestos, Fluorspar, and Columbium-Tantalum Production and Purchase Act of 1956 (Public Law 733, 84th Cong.); the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480, 83d Cong.); the Agricultural Act of 1956 (Public Law 540, 84th Cong.); and the Federal Facilities Corporation Act of 1956 (Public Law 608, 84th Cong.)

TOTAL GOVERNMENT INVENTORIES

As of June 30, 1958, the total Government inventories of strategic and critical materials acquired under authorizations amounted to an acquisition cost of $7.9 billion, of which $680.1 million was of nonstockpile materials, some of which have little or no market value at this time. The Administrator of GSA advised the chairman of this committee on November 25, 1958, that the estimated market value of these nonstockpile materials was about one-fourth of their book value, or approximately $170 million. The market value of the stockpile grade inventory was estimated at $6.4 billion on June 30—about $818.3

million below its acquired cost. GSA estimates that another $1.1 billion (contract value) of the total Government's exposure is likely to be delivered to the Government in the months ahead, as follows: National stockpile, $103.7 million; supplemental stockpile, $87.3 million; DPA inventory, $810.6 million; CCC inventory, $55.4 million; and the inventory of the Department of the Interior, $1.6 million. The Government's maximum exposure under existing DPA expansion contracts totals $1.4 billion at contract cost. Of this total, GSA estimates that $810.6 million more nearly represents the acquisition cost of the materials which, it is reasonable to assume, the Government will be required to accept under the contractors' options. The acquisition costs and the market value of the materials in inventory, and on order under the various procurement programs, on June 30, 1958, were as follows:

Summary of Government inventories, June 30, 1958

	Inventory		On order acquisition cost
	Acquisition cost	Market value [1]	
National stockpile (Public Law 520):			
Stockpile grade	$5,912,545,100	$5,414,118,800	[2] $103,676,000
Nonstockpile materials	256,477,100		
Total	[3] 6,169,022,200		
Defense Production Act inventory (expansion programs):			
Stockpile grade	[4] 741,348,600	472,537,600	[5] 810,585,000
Nonstockpile materials	403,238,807		
Total	1,144,587,407		
Supplemental stockpile (Public Law 480):			
Stockpile grade	277,828,200	242,748,100	87,318,200
Nonstockpile materials	14,095,000		
Total	291,923,200		
Commodity Credit Corporation inventory (Public Law 480):			
Stockpile grade	224,931,000	220,751,100	55,431,000
Nonstockpile materials	1,606,100		
Total	226,537,100		
Interior Department inventory (Public Law 733):			
Stockpile grade	18,317,300	7,748,100	[6] 1,623,800
Nonstockpile materials	4,697,900		
Total	23,015,200		
Federal Facilities Corporation (Public Law 608)—Tin:			
Stockpile grade	9,518,200	8,347,400	0
Subtotals:			
Stockpile grade	7,184,488,400	6,366,251,100	1,058,634,000
Nonstockpile materials [7]	680,114,907		
Grand total	7,864,603,307	6,366,251,100	1,058,634,000

[1] Market value of nonstockpile materials in Government inventories not available.
[2] Includes an estimated value of $47,002,000 for materials expected to be transferred in the future from International Cooperation Administration account at no cost to the stockpile.
[3] Includes an estimated value of approximately $1,081,413,000 for surplus materials transferred to the stockpile (including International Cooperation Administration) at no acquisition cost to the stockpile.
[4] Does not include work in process (nickel and mica) totaling $616,076.
[5] Includes the value of materials at market prices which it is reasonable to assume will be delivered and the Government will be required to accept under Defense Production Act expansion-program contracts. The Government's maximum obligation under guaranteed-market clauses, floor-price agreements, and other contractor's options amounts to about $1,387,798,000. Aluminum, cobalt, copper, metallurgical manganese molybdenum, nickel, and titanium make up over 95 percent of the estimated deliveries through 1963.
[6] Acquisitions limited to asbestos, columbium-tantalum, and acid-grade fluorspar.
[7] Includes materials not having stockpile objectives and materials of nonstockpile grade.

DEFENSE PRODUCTON EXPANSION PROGRAMS AND BORROWING AUTHORITY STATUS

Section 302 of the Defense Production Act provides for loans and the guarantee of loans to private business for the expansion of capacity, the development of technological processes, or the production of essential materials, including the exploration, development, and mining of strategic and critical metals and minerals. Section 303 of the act provides for purchases of or commitments to purchase metals, minerals, and other materials, for Government use or resale; and for the encouragement of exploration, development, and mining of strategic minerals and metals. This section also provides for the processing and refining of materials, as well as for transportation and storage. When in his judgment it will aid the national defense, the President is authorized to install additional equipment, facilities, processes, or improvements to plants, factories and other industrial facilities owned by private persons. These provisions in the Defense Production Act have provided the means for carrying out a vast expansion of productive capacity and supply in order to further provide for our national defense and national security. These expansion programs have been financed under section 304 (b) of the Defense Production Act, which provides in part as follows:

> Any agency created under this section, and any department, agency, official, or corporation utilized pursuant to this section is authorized, subject to the approval of the President, to borrow from the Treasury of the United States, such sums of money as may be necessary to carry out its functions under sections 302 and 303: *Provided*, That the amount borrowed under the provisions of this section by all such borrowers shall not exceed an aggregate of $2,100,000,000 outstanding at any one time.

As of June 30, 1958, ODM had allocated all except $7.2 million of the total $2.1 billion borrowing authority to delegate agencies to carry out various expansion programs under sections 302 and 303 of the Defense Production Act, as follows:

Allocated for activities authorized under sec. 302:	
Department of Treasury	$196,000,000
Export-Import Bank	35,000,000
Total	231,000,000
Allocated for activities authorized under sec. 303:	
Procurements programs:	
General Services Administration	1,755,000,000
Department of Treasury	1,600,000
Department of Agriculture	66,366,000
Total	1,822,966,000
Exploration programs: Department of the Interior	38,800,000
Total	1,861,766,000
Total funds allocated	2,092,766,000
Reserve unallocated by Office of Defense Mobilization	7,234,000
Total authorized by the Congress	2,100,000,000

As of June 30, 1958, ODM had certified expansion programs involving total gross transactions estimated at $8.4 billion, with a probable net cost to the Government estimated at over $1.1 billion. Of the total programs certified, GSA had entered into facilities expansions, supply contracts, and special services for critical and strategic materials, with both domestic and foreign producers, involving about $7.6 billion, with an estimated net loss of $1.1 billion. By the end of June nearly $6 billion of the gross contracts had been completed or terminated, of which $3.4 billion in the form of materials, services, or facility assets, had been delivered to the Government. Another $2.6 billion of completed gross transactions for which the Government was obligated was not delivered to the Government due primarily to contractors' sales direct to others and expiration dates limiting "put" rights. The gross transactions remaining uncompleted under the existing expansion contracts, including estimated custodial, administrative, and interest charges, amounted to $1.6 billion at the end of June.

GSA estimates that the $1.1 billion probable ultimate net loss involved on the $7.6 billion in gross transactions consummated will be made up as follows: Losses realized to date, $221 million; losses anticipated on present DPA inventory, $552.2 million; and losses estimated on future deliveries, $298.7 million.

Until mid-1957 GSA estimated that the $2.1 billion borrowing authority would be sufficient to cover all programs through the fiscal year 1965. Prior to 1957 most of the materials delivered to the DPA inventory were under firm purchase contracts priced either at market or at premium prices to encourage increased production. While some contracts contain options whereby the contractor is privileged to "put" to the Government production from new facilities not sold commercially, domestic consumption through 1956 maintained a sufficiently high level that few, if any, of the contractors had reason to exercise such "put" rights. This situation changed, however, as the level of general business activities began to decline sharply in late 1956 and the market prices of most minerals decreased. As commercial sales declined, holders of option contracts started to call upon the Government to take excess metals under the contract provisions. During 1957 and 1958 production of such strategic materials as aluminum, copper, and nickel, which had been in critically short supply for several years prior to 1957, greatly exceeded commercial demands and contractors tendered increased quantities of their production to the Government. These unexpected deliveries resulted in substantial amounts of borrowing authority funds being required for additional working capital. As of the production period ending September 30, 1958, the Government had been called upon to accept "puts" in the amounts of 1.3 billion pounds of aluminum, 194.6 million pounds of copper, and 1.5 million pounds of nickel, representing a total acquisition cost of $379.4 million to the Government for these 3 metals alone since December 1956.

In addition to the shift in the metal market from a short supply to an oversupply situation, other developments have caused a further impact on the borrowing authority fund. The most significant of these are: (1) DPA expansion programs were predicated on sales of substantial quantities of materials to the stockpile to fulfill 5-year

objectives; (2) changes in the strategic concept reduced stockpile objectives from a 5-year to a 3-year inventory level and closed a major disposal outlet for DPA inventories; (3) no new appropriations have been made for 3 years for the transfer of DPA inventories, which has resulted in higher custodial, administrative, and operating expenses; and (4) the compounding of interest charges payable to the Treasury.

The following table presents a long-range forecast by GSA of cash requirements to fulfill the Government's obligations under contractual commitments in effect on June 30, 1958. It will be noted that this table shows the probable cost requirements on the basis of current estimates of deliveries ($810.6 million) under existing contracts rather than maximum cash requirements based on the Government's maximum exposure ($1.4 billion) under existing contracts. As indicated, the potential cash deficit is expected by GSA to become a reality in the fiscal year 1960, with the total deficit amounting to an estimated $779.1 million through June 30, 1965.

Defense Production Act borrowing authority—Long range forecast of probable cash requirements

Defense Production Act borrowing authority—Long range forecast of probable cash requirements

Assumptions: (1) Probable deliveries from contracts in effect on June 30, 1958; (2) no sales except known items; (3) payment of full interest costs through 1965.

[Thousands of dollars]

	Total	Fiscal year 1959	Fiscal year 1960	Fiscal year 1961	Fiscal year 1962	Fiscal year 1963	Fiscal year 1964	Fiscal year 1965
A. General Services Administration:								
1. Cumulative net expenditures, beginning of fiscal year	$1,416,610	$1,416,610	$1,772,566	$2,056,902	$2,252,364	$2,421,864	$2,518,239	$2,607,019
2. Activity during year:								
(a) Expenditures:								
(1) Purchase of materials	790,584	336,269	217,004	121,244	89,954	16,113	5,398	4,602
(2) Treasury interest (at 3 percent)	463,628	47,131	56,593	63,684	69,077	73,006	75,742	78,395
(3) Other expenditures	83,840	18,951	16,841	14,532	10,657	7,439	7,720	7,700
(4) Total expenditures	1,338,052	402,351	290,438	199,460	169,688	96,558	88,860	90,697
(b) Receipts:								
(1) Sales to stockpile (per ODM directive)	35,044	35,044						
(2) Sales to others	4,630	4,630						
(3) Other receipts	17,272	6,721	6,102	3,998	188	183	80	
(4) Total receipts	56,946	46,395	6,102	3,998	188	183	80	
(c) Net expenditures during year	1,281,106	355,956	284,336	195,462	169,500	96,375	88,780	90,697
3. Cumulative net expenditures, end of fiscal year	2,697,716	1,772,566	2,056,902	2,252,364	2,421,864	2,518,239	2,607,019	2,697,716
B. Other agencies:								
1. Cumulative net expenditures, beginning of fiscal year:								
(a) Interior Department	28,865	28,865	31,442	32,630	33,659	34,844	36,206	37,759
(b) Agriculture Department	58,633	58,633	58,807	63,748	64,779	64,779	66,304	66,603
(c) Treasury Department	165,621	165,621	157,851	142,850	125,851	106,851	91,851	76,851
(d) Export-Import Bank	29,569	29,569	24,373	19,251	14,223	11,539	11,111	10,652
(e) Total	282,688	282,688	272,473	258,479	238,512	218,013	205,472	191,865
2. Net expenditures or receipts (−) during year:								
(a) Interior Department	10,677	2,577	1,187	1,030	1,185	1,362	1,552	1,784
(b) Agriculture Department	14,602	174	4,941	1,031		1,525	299	6,632
(c) Treasury Department	−103,640	−7,770	−15,000	−17,000	−19,000	−15,000	−15,000	−14,870
(d) Export-Import Bank	−22,914	−5,196	−5,122	−5,028	−2,684	−428	−458	−3,998
(e) Total	−101,275	−10,215	−13,994	−19,967	−20,499	−12,541	−13,607	−10,452
3. Cumulative net expenditures, end of fiscal year	181,413	272,473	258,479	238,512	218,013	205,472	191,865	181,413

Defense Production Act borrowing authority—Long range forecast of probable cash requirements—Continued

[Thousands of dollars]

	Total	Fiscal year 1959	Fiscal year 1960	Fiscal year 1961	Fiscal year 1962	Fiscal year 1963	Fiscal year 1964	Fiscal year 1965
C. Grand total, all agencies:								
1. Cumulative net expenditures, end of fiscal year	$2,879,129	$2,045,039	$2,315,381	$2,490,876	$2,639,877	$2,723,711	$2,798,884	$2,879,129
2. Add working cash requirement		17,000	14,000	10,000	8,000	5,000	3,000	
3. Total borrowings required	2,879,129	2,062,039	2,329,381	2,500,876	2,647,877	2,728,711	2,801,884	2,879,129
4. Deduct borrowing authority limitation	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
5. Surplus (+) or deficit (−)	−779,129	+37,961	−229,381	−400,876	−547,877	−628,711	−701,884	−779,129

On June 25, 1958, the Director of ODM recommended that Congress amend section 304 of the Defense Production Act to provide for the unanticipated costs by writing off $300 million of actual losses incurred as of June 30, 1958, without reducing the borrowing authority. He indicated that no contingent obligation was estimated for the contracts for many of the materials which he anticipated would be sold in normal commercial channels. The Director of ODM stated that the then current estimates indicated that the probable ultimate net cost of all transactions to be financed by borrowings under section 304 of the act would exceed the $2.1 billion authorized under the act.

A summary of the nonrecoverable losses reported by GSA and the other agencies for the period ending June 30, 1958, are as follows:

General Services Administration:	
Net operating loss (all commodities)	$89, 539, 494
Administrative expense	20, 219, 447
Custodial expense	5, 686, 780
Treasury interest	97, 350, 514
Surplus adjustments	8, 230, 005
Other income	8, 668
Total	221, 017, 572
Other agencies:	
Department of Agriculture	63, 170, 000
Department of the Interior	16,689, 000
Department of the Treasury	726, 000
Total	80, 585, 000
Total losses, all agencies	301, 602, 572

GSA estimates that through the writeoff of the actual losses the present borrowing authority fund should be adequate to cover the Government's commitments beyond the 2-year extension period of the act (June 30, 1960).

The Senate Banking and Currency Committee acted favorably on the agency's recommendation and approved a bill to amend the act (S. 4162), authorizing that all nonrecoverable losses incurred prior to July 1, 1958, in carrying out the functions under sections 302 and 303 of the act, be written off. Although there was considerable discussion in the Senate with regard to this bill during the closing days of the 2d session of the 85th Congress, no final action was taken.

DEFENSE PRODUCTION ACT INVENTORY

As of June 30, 1958, total deliveries of minerals and metals to the DPA inventory amounted to about $2.2 billion at cost, of which $943.8 million was sold to the stockpile and to private contractors primarily for defense purposes. A loss of approximately $72.5 million, representing the difference between the acquisition cost and market price of the materials sold, was sustained by the borrowing authority. A summary of the materials held in the Defense Production Act inventory, valued at $1.1 billion at cost and $669.3 million at market prices, together with nonrecoverable losses and expenses incurred in the administration of the expansion programs, as of June 30, 1958, is shown in the following table:

Summary of Defense Production Act inventory—Total purchases, inventory, and operating costs, December 1950 through June 30, 1958

	Total purchases	June 30, 1958, inventory at cost	Sales from inventory			Operating expense	Net operating profit or (loss)	June 30, 1958, market value of inventory
			Received from sales	Government cost	Gain or (loss)			
Aluminum (pig)	$475, 283, 304	$269, 407, 326	$206, 004, 884	$205, 875, 978	$128, 906	$49, 812	$79. 094	$253, 826, 000
Aluminum subsidy (power)						19, 108, 397	(19, 108, 397)	
Aluminum (sheet)	4, 783, 156	0	5, 036, 339	4, 783, 156	253, 183	43, 941	209. 242	
Asbestos	2, 102, 575	2, 102, 575	0	0	0	43, 790	(43, 790)	1, 428, 000
Bauxite	21, 094, 359	13, 957, 953	7, 085, 435	7, 136, 406	(50, 971)	77, 417	(128, 388)	12, 656, 000
Beryllium	1, 215, 470	674, 829	426, 831	540, 641	(113, 810)	176, 952	(290, 762)	469, 000
Bismuth	52, 362	52, 362	0	0	0	0	0	52, 000
Chrome	25, 505, 733	22, 802, 109	2, 468, 089	2, 703. 624	(235, 535)	572, 093	(807, 628)	11, 338, 000
Cobalt	22, 847, 404	18, 297, 259	3, 964, 168	4, 550, 145	(585, 977)	1, 256	(587, 233)	16, 890, 000
Columbium-tantalum	75, 023, 731	57, 403, 196	10, 609, 772	17, 620, 535	(7, 010. 763)	1, 136, 701	(8, 147, 464)	18, 543, 000
Columbium-tantalum subsidy						6, 276. 886	(6, 276. 886)	
Copper	106, 995, 693	54, 416, 767	56, 243, 427	52, 578, 926	3, 664, 501	435, 050	3, 229, 451	49, 442, 000
Copper subsidy						1, 816, 759	(1, 816, 759)	
Cryolite	15, 338, 836	10, 760, 467	3, 619, 369	4, 578, 369	(959, 000)	198, 193	(1, 157. 193)	10, 132, 000
Fluorspar	14, 962, 096	1, 394, 453	10, 278, 689	13, 567, 643	(3, 288, 954)	44, 678	(3, 333, 632)	985, 000
Graphite	177, 545	177, 545	0	0	0	50, 625	(50, 625)	0
Lubricating graphite development						173, 858	(173, 858)	
Lead	13, 617, 643	1, 519, 109	11, 810, 184	12, 098, 534	(288, 350)	3, 393	(291, 743)	882, 000
Magnesium	122, 754, 518	0	110, 860, 262	122, 754, 518	(11, 894, 256)	3, 725, 319	(15, 619, 575)	
Manganese	160, 330, 410	124, 300, 317	27, 756, 040	36, 030, 093	(8, 274, 053)	5. 170, 601	(13, 444. 654)	53, 022, 000
Mercury	4, 261, 889	1, 816, 738	2, 468, 325	2, 445, 151	23, 174	7, 864	15. 310	1, 948, 000
Mica	24, 782, 076	13, 292, 074	3, 691, 243	11, 490, 002	(7, 798, 759)	410. 082	(8, 208. 841)	6, 347, 000
Molybdenum	39, 889, 848	0	38, 457, 048	39, 889, 848	(1, 432, 800)	81, 013	(1, 513. 813)	
Nickel	297, 008, 349	69, 058, 853	208, 022, 393	227, 949, 496	(19, 927, 103)	2, 797, 726	(22, 724. 829)	60, 340, 000
Rutile	0	0	0	0	0	9, 918	(9, 918)	
Scrap (nonferrous)	532, 904	0	426, 313	532, 904	(106, 591)	0	(106, 591)	
Selenium	0	0	0	0	0	228, 443	(228, 443)	
Tin	176, 592, 886	1, 037, 651	174, 082, 935	175, 555, 235	(1, 472, 300)	16, 788	(1, 489, 088)	1, 074, 000
Titanium	161, 107, 019	156, 652, 629	4, 309, 815	4, 454, 390	(144, 575)	1, 970. 026	(2, 114. 601)	86. 417, 000
Tungsten	366, 918, 460	325, 463, 195	34. 540, 972	41. 455, 265	(6, 914, 293)	2, 049. 373	(8, 963, 666)	83, 579, 000
Zinc	27, 718, 032	0	21, 668, 893	27, 718, 032	(6, 049, 139)	93. 435	(6, 142, 574)	
Total	2, 160, 896, 298	1, 144, 587, 407	943, 831, 426	1, 016, 308, 891	(72, 477, 465)	46, 770, 389	(119, 247, 854)	669, 270, 000
Minerals and metals expenses not included above:								
Research and development							(7, 554)	
Losses on accounts receivable and advances							(2, 040. 733)	
Depreciation							(3, 642, 043)	
Loss on disposal of assets							(2, 597, 056)	
Other							(445. 446)	
Total							(8, 732, 832)	
Income from interest, rentals, etc							23, 043, 147	
							14, 310, 315	

Total							(445, 446)	
							(8, 732, 832)	
Income from interest, rentals, etc							23, 043, 147	
Total not included above							14, 310, 315	
Net nonrecoverable operating loss							104, 937, 539	

NATIONAL STOCKPILE PROGRAM

On June 30, 1958, the Director of ODM announced general policy changes for the stockpile of strategic and critical materials. He stated that the strategic stockpile shall take account of the potentiality of limited war and general war and shall assume rapid mobilization in the event of an emergency. He stated also that all stockpile objectives shall be adequate for limited or general war, whichever shows the larger supply-requirement deficit to be met by stockpiling, and that all objectives shall be limited to meeting estimated shortages for a 3-year emergency period. The new objectives consist of (1) a "basic objective" which assumes reliance of sources of supply factored to reflect estimated supply risks and (2) a "maximum objective" which includes an additional allowance to take into account the complete discounting of sources of supply beyond North America and comparably accessible areas. Based on the latest military requirements, ODM established new interim objectives for each stockpile material on June 30, 1958. The new objectives are substantially lower than previous objectives and, for many critical materials, represent over a 50 percent reduction in stockpile requirements. The following table shows a comparison between the interim objectives and those prevailing before the change. Figures shown are based on market prices as of June 30, 1958.

Stockpile objectives

	In effect Mar. 31, 1958		June 30, 1958
Procurement priority	$2,906,781,200	Basic	$2,907,441,000
Minimum increment	2,443,175,900		
Long-term increment	3,156,734,100	Maximum increment	1,488,303,000
Total objectives	8,506,691,200		4,395,744,000

The Government's total inventories of materials meeting stockpile specifications were estimated at $6.4 billion at market on June 30. These were being held in the following Government inventories:

National stockpile	$5,414,118,800
Supplemental stockpile	242,748,100
DPA inventory	472,537,600
CCC barter	220,751,100
Department of Interior	7,748,100
Federal Facilities Corporation (tin)	8,347,400
Total stockpile grade	6,366,251,100

On the basis of the new interim objectives, $2.8 billion of this stockpile grade inventory is in excess of the revised requirements. The status of the national stockpile at the end of June in terms of the newly established objectives is as follows:

Interim objectives (market prices)

	Basic	Percent of objective	Maximum	Percent of objective
Value of objective	$2,907,441,000	100.0	$4,395,744,000	100.0
Value of inventory [1]	2,763,285,100	95.0	3,620,055,000	82.4
Value on order	8,697,400	.3	[2] 49,032,700	1.1
Total	2,771,982,500	95.3	3,669,087,700	83.5
Total commodities	75		75	
Total objectives completed	63		50	

[1] Figures do not include $1,800,000,000 of materials held in stockpile which are stockpile grade in excess of objectives, nonstockpile grade and stockpile grade for which former objectives have been rescinded.
[2] Figure includes $22,100,000 to be transferred from ICA but does not include $29,700,000 on order for stockpile delivery and $24,900,000 expected to be transferred from ICA which are in excess of the maximum stockpile objectives for the commodities involved.

In its January 28, 1958, report to the Director of ODM, the special Stockpile Advisory Committee pointed out that the Government has some inventories of materials that are below normal quality and hence are not usuable directly in present commercial facilities. The committee recommended in the report that when the quantity of a specification-grade material in Government inventories is less than the maximum stockpile goal, subspecification grades of that material should be upgraded when this can be accomplished at less cost than buying new material.

On September 3, 1958, the Director of The Office of Civil and Defense Mobilization issued a directive authorizing GSA to procure stockpile materials for the fiscal year ending June 30, 1950, and to provide for the upgrading of specified materials now in Government inventory or scheduled for delivery to the Government. The directive provided for processing materials to the following more readily usable forms: oxygen-free copper, ferromolybdenum, ferrovanadium, molybdic oxide and tungsten carbide powder. In issuing the directive, the Director of OCDM noted that the $3 million stockpile appropriation for the fiscal year 1959 is available only for upgrading materials required to meet stockpile objectives and that new purchases would be made with funds carried over from previous years. The materials authorized by the directive for open market purchases are amosite asbestos, small diamond dies, and muscovite block and film mica.

DOMESTIC MINERALS PROGRAM EXTENSION ACT OF 1953 (PUBLIC LAW 206, 83D CONG.)

The last annual report covered in some detail the legislative history and the administration of the domestic purchase program under Public Law 206, which was established early in the Korean war under GSA purchase regulations. The purpose of this program was to encourage the production of seven domestic materials—tungsten, manganese, chromite, mica, asbestos, beryl, and columbium-tantalum bearing ores— with incentive payments generally higher than prevailing market prices. At that time these materials were in short supply. The original purchase regulations contained quantity limitations that would terminate purchases if reached before the expiration dates, which ranged from June 30, 1955, to December 31, 1956. All purchases were financed with DPA borrowing authority funds with the

exception of chrome, which was acquired with stockpile funds. A large portion of the domestic minerals purchased under the regulations were of substockpile grade. The 83d Congress enacted the Domestic Minerals Program Extension Act of 1953 (Public Law 206) extending the regulations for a period of 2 years without affecting the quantity limitations. In 1955, when it appeared that limitation quotas for certain materials would be reached before the termination dates, both the House and the Senate passed H. R. 6373, amending Public Law 206. H. R. 6373 continued Government purchases to the established termination dates without regard to the quantities of materials acquired. The Director of ODM declined to recommend this bill, stating that, since there was no current defense need for extending the programs in the manner contemplated, such action would appear to be primarily of economic assistance to certain elements of the domestic mining industry and, therefore, it was not appropriate to use Defense Production Act funds for such a purpose. The bill was vetoed by the President on August 14, 1955.

Although Government purchases of asbestos, columbium-tantalum and tungsten terminated prior to June 30, 1957, because of quota limitations, acquisitions have continued in the case of beryl, chromite, manganese, and mica. For the fiscal year ending June 30, 1958, such purchases totaled nearly $24.2 million. Except in the case of mica, the stockpile inventory exceeds the maximum objective for each material. The following table shows the total Government purchases through June 30, 1958, and indicates the probable ultimate net cost estimated for each program which will be chargeable to the DPA borrowing authority. With the exception of chromite, all materials acquired under this program have been delivered to the DPA inventory.

Government purchases and estimated net losses under domestic minerals purchase program (Public Law 206), through June 30, 1958

	Termination date	Unit	Quota limitation	Total purchases				Estimated total program [2]	
				Fiscal year 1958 [1]		Through June 30, 1958		Cost	Net loss
				Quantity	Cost	Quantity	Cost		
Asbestos	Oct. 1, 1957	Short tons	1,500						
Crude No. 1 and 2						1,500	$2,145,000	$2,145,000	$716,000
Crude No. 3						851			
Beryl	June 30, 1962	Short tons	4,500	481	$262,145	1,948	1,113,000	2,557,000	804,000
Chromite	June 30, 1959	Long tons	200,000	46,629	3,577,936	197,444	18,359,000	18,359,000	[3]
Columbium-tantalum [4]	Dec. 31, 1958	Pounds	15,000,000			15,569,971	67,376,000	67,376,000	41,119,000
Manganese:									
Butte-Philipsburg, Mont	June 30, 1958	Long-ton units	6,000,000	1,911,238	3,092,689	6,017,435	11,217,000	11,217,000	11,217,000
Deming, N. Mex	do	do	6,000,000			6,215,258	12,370,000	12,370,000	12,370,000
Wenden, Ariz	do	do	6,000,000			6,108,316	11,211,000	11,211,000	11,211,000
Domestic small producers	Jan. 1, 1961	do	28,000,000	5,637,394	14,725,026	19,356,620	56,352,000	111,778,000	35,451,000
Mica	June 30, 1962	Short tons	25,000	2,915	2,529,793	14,423	18,631,000	33,223,000	28,412,000
Tungsten	July 1, 1958	Short-ton units	3,000,000			2,995,792	189,732,000	189,732,000	139,571,000
Total					24,187,589		388,506,000	459,968,000	280,871,000

[1] Acquisition cost does not include custodial, administrative and operating expenses.
[2] Estimated total program is based on acquisition costs and probable ultimate net cost to the Government as estimated by GSA.
[3] Purchases made with Public Law 520 funds for delivery to stockpile.
[4] Includes both domestic and foreign purchases made under the program.

DOMESTIC TUNGSTEN, ASBESTOS, FLUORSPAR, AND COLUMBIUM-TANTALUM PRODUCTION AND PURCHASE ACT OF 1956 (PUBLIC LAW 733, 84TH CONG.)

Subsequent to the President's veto of H. R. 6373, which would have assured continuance of domestic purchases of certain materials until the contract-termination dates, the Secretary of the Interior urged that the Congress provide interim assistance outside of the Defense Production Act to the producers of some minerals pending congressional consideration of recommendations from the Department of the Interior for a long-range nondefense program. The Congress enacted the Domestic Tungsten, Asbestos, Fluorspar, and Columbium-Tantalum Production and Purchase Act of 1956 (Public Law 733) to provide such assistance to these mineral industries. The act authorizes purchases through December 31, 1958, or until quota limitations are delivered, whichever occurs first, at premium prices substantially above the market in each case with the exception of asbestos. The Department of the Interior estimated the cost of carrying on this program for the 2½-year period ending December 31, 1958, at $91.7 million. An initial appropriation of $21 million was authorized in July 1956 to start the program but before the year end most of the $16.2 million allocated for the purchase of tungsten was depleted. Since that time no further tungsten purchases have been made under the act inasmuch as the Congress has not made further appropriations for this purpose. The 85th Congress did appropriate an additional $6.7 million (Public Law 85–77, July 1, 1957) to the Department of the Interior to extend the purchase of asbestos, acid-grade fluorspar, and columbium-tantalum. The following table indicates that the Government purchased $4.9 million of these materials during the fiscal year 1958 and over $22.7 million from July 1956 through June 30, 1958. All materials delivered under this program are scheduled for the supplemental stockpile.

Domestic material purchases (Public Law 733), July 1956 through June 30, 1958

Material	Termination date	Unit of measure	Total limitation	Interim limitation	Purchases			
					1958 fiscal year		Total	
					Quantity	Cost	Quantity	Cost
Asbestos:								
Crude Nos. 1 and 2	Dec. 31, 1958	Short ton	2,000	2,000	825	$999,357	1,353	$1,607,037
Crude No. 3	do	do	2,000	1,838	461	184,274	815	325,734
Columbium tantalum	do	Pound	250,000	59,810	48,966	195,107	49,380	195,810
Fluorspar, acid grade	do	Short ton	250,000	135,185	65,896	3,530,999	94,012	5,065,037
Tungsten	do	Short-ton unit, tungsten trioxide.	1,250,000	293,584	0	0	283,463	15,537,921
Total						4,909,737		22,731,539

BARTER PROGRAM FOR STRATEGIC MATERIALS (PUBLIC LAW 480, 83D CONG.)

Strategic materials continued to be acquired during the past year through authorized barter programs under the Agricultural Trade Development and Assistance Act of 1954, as amended (sec. 303, Public Law 480). These barter acquisitions consisted of materials included in the procurement directive issued by ODM to meet the priority objectives of the national stockpile and for delivery to the supplemental stockpile. The act provides that materials placed in the supplemental stockpile cannot be released without the approval of the Congress.

During fiscal 1958 the value of strategic materials delivered by barter amounted to approximately $177.8 million, which brought the accumulated deliveries of bartered materials since the inception of the bartering program in fiscal 1950 through June 30, 1958, to $734.9 million. Of this total, $229.4 million was delivered to the minimum stockpile; $191.5 million was procured for the previous long-term stockpile objectives, but is being held in CCC inventory pending transfer; and $314 million was acquired for the supplemental stockpile, of which $291.9 million has been transferred to the supplemental stockpile as provided by section 206 of the Agricultural Act of 1956. In the past, materials acquired for the minimum stockpile have been transferred immediately and reimbursement has been made from stockpile funds (Public Law 520). This, however, has not been the case with materials acquired by barter for delivery to the long-term stockpile. Through June 1958 such materials have not been transferred by CCC. ODM has used the available stockpile funds to effect transfers against minimum objectives. During late 1957 and early 1958, funds were available for such transfers but action was deferred pending consideration of the recommendations of the special Stockpile Advisory Committee and subsequent policy changes. ODM has indicated that stockpile funds carried over into fiscal 1959 from previous appropriations are adequate to permit the transfer of all materials held by CCC for which the new maximum objective is not completed. Materials acquired by CCC for the long-term stockpile in excess of the new maximum objective will be placed in the supplemental stockpile.

The value of materials acquired by CCC for the strategic and supplemental stockpiles since the inception of the barter program through June 30, 1958, is as follows:

Materials delivered by barter

Materials acquired for—	Fiscal years (in millions)				
	1950–55	1956	1957	1958	Total
Minimum stockpile	$88.0	$64.6	$58.1	$18.7	$229.4
Long-term stockpile	43.2	32.6	31.3	84.4	191.5
Supplemental stockpile	2.1	71.2	160.8	79.9	[1] 314.0
Total	133.3	168.4	250.2	183.0	734.9

[1] Materials transferred or to be transferred to supplemental stockpile.

In April 1957 the Department of Agriculture suspended the barter program to study whether safeguards were necessary to eliminate the possibility of substitution of barter transactions for dollar sales. On

May 28, 1957, revised regulations were issued by the Secretary of Agriculture placing certain safeguards and restrictions on future barter transactions. Among other requirements, responsibility was placed on barter contractors to prove that barter transactions represented a net increase over possible cash exports sales to the country involved. This, together with a general tightening of other regulations, materially restricted the number of barter contracts this past year. The value of barter contracts for the year ending June 30, 1958, declined to $65.1 million from $272.6 million in the previous fiscal year and from $315.8 million in fiscal 1956.

In August 1958 the Congress, in extending Public Law 480 to December 31, 1959, enacted several amendments designed to reinstate the barter program to at least the volume which prevailed prior to the regulations of May 1957. One of the amended provisions transfers the responsibility for the designation of barter materials to the President from the Secretary of Agriculture. Conference Report No. 2694, dated August 22, 1958, indicates that in enacting section 303, the Congress has broadened the base from which the President may select the materials to be designated for barter. This section directs that the Secretary shall, whenever he determines that such action is in the best interest of the United States, and to the maximum extent practicable, barter or exchange agricultural commodities for such strategic or other materials of which the United States does not domestically produce its requirements and which entail less risk of loss through deterioration or substantially less storage charges, as the President may designate.

The conference report further states that under the language of the law, the burden of proof, as to a barter transaction representing a net increase in export sales, has been shifted from the contractor to the Secretary of Agriculture and, in exercising that authority, he is required to follow substantially the same procedures as are followed in title I of Public Law 480. The report states also that the safeguarding of usual marketings is intended to be limited to usual United States marketings. The Secretary of Agriculture was, however, directed to assure that a barter transaction does not replace a cash sale for American dollars, and that barter will not unduly disturb world prices of agricultural commodities. The law specifically states that the Secretary may permit domestic processing of raw materials from foreign ores. Under the May 1957 regulations, the Secretary made a determination that materials delivered under barter contracts could not be produced or processed in the United States.

STOCKPILE TRANSFERS FROM OTHER AGENCIES

Over the past years substantial quantities of strategic and critical materials have been acquired by the Government under specific provisions in other legislation. Usually such statutes provide for the materials to be delivered to the national stockpile without reimbursement. For example, the Mutual Security Act of 1954 (Public Law 162) and the Federal Property and Administrative Services Act of 1949 (Public Law 152) provide for the transfer of strategic materials to the stockpile without repayment. As of June 30, 1958, the estimated market value of all surplus materials transferred to the stockpile without involving the expenditure of stockpile funds amounted to $1.1 billion.

SURPLUS DISPOSAL POLICY

In its Seventh Annual Report the committee outlined the established policy of ODM for dealing with the disposal of surplus materials that have been acquired under the Defense Production Act and other procurement programs. This policy (Defense Mobilization Order V–3, issued March 18, 1954) provided that materials held in DPA inventory and found to be surplus would not be disposed of either in whole or in part, without clear indication that such action would not have a seriously adverse effect upon market prices or create major market fears or uncertainties, and without the prior approval of the President or an official specifically designated by him. Under the policy the entire inventory of any material held in the stockpile had to be declared no longer needed for defense purposes before any portion could be sold as surplus. This eliminated the possibility of the disposal of many stockpile inventories in excess of the national stockpile objective regardless of the quantity involved. Changes in our strategic planning gave this policy added significance, as the shift from a 5-year to a 3-year war concept has lowered stockpile requirements and thereby increased the quantities of many materials which will be in excess of defense needs.

In its report dated January 1958, the special Stockpile Advisory Committee, appointed by the Director of ODM to review and to make recommendations with respect to the Government's stockpile policy, went a step further in recommending that in the light of current world, domestic, defense, political, and economic conditions, all metals and minerals now in Government stocks suitable to use in normal, commercial processes be retained. It predicated this recommendation on the premise that (*a*) expansion of supplies of metals and minerals usually require considerable time and major capital investment; (*b*) the storage of such minerals is comparatively inexpensive; (*c*) the consumption of most metals and minerals has increased with our industrial expansion and may be expected to increase rapidly in the rest of the free world as the underdeveloped countries industrialize; and (*d*) readily mineable domestic ore bodies have been substantially depleted, and the grade of many ores being mined domestically is declining, although this has been offset to some extent by improved methods of mining and extraction.

It was the further recommendation of the special committee that (*a*) the executive policy be rescinded requiring that the entire stockpile inventory of a material be declared surplus before any portion is eligible for disposal; and that (*b*) Congress modify present statutory provisions (sec. 3e, Strategic and Critical Stock Piling Act) in a manner to permit the disposal of stockpile surpluses, by sale or otherwise, without the necessity of obtaining express approval of the Congress.

On June 30, 1958, the Director of ODM issued DMO V–7 revising the general policies relating to the stockpile of strategic and critical materials. This order makes no mention of the previous executive policy requiring that the entire stockpile inventory of a material be declared surplus before any portion is eligible for disposal, but the order modifies that policy by the following language:

> Disposals of excesses shall be undertaken only if they do not cause serious economic disruption or adversely affect the international interests of the United States.

Small Business

It is stated in section 701 (a) of the Defense Production Act that it is the sense of the Congress that small business enterprises be encouraged to make the greatest possible contribution toward achieving the objectives of the act.

As in previous years this committee has requested that each department and agency performing functions under the Defense Production Act summarize its activities to encourage small business. The summaries of these various departments and agencies are set forth in the appendix of this report.

Although the Small Business Administration does not have delegated functions under the Defense Production Act, a report has been requested from this agency from year to year for inclusion in the annual report of this committee. The main purpose of this report is to obtain the views of the one administrative agency having responsibilities which relate principally to small business problems.

The Department of the Interior reports that approximately 60 percent of all contracts of the Defense Minerals Exploration Administration called for expenditures of $25,000 or less and about 43 percent of these contracts provided for the operator to spend less than $3,000. Based upon financial standing, annual production, number of employees and prominence in their particular field in the mineral industry, in excess of 80 percent of the participants were classed as small business. The Department of the Interior states that the electric power industry in the Nation is composed of some 3,600 systems operated by some 450 private utility companies, 1,900 municipalities, 1,000 rural cooperatives and public power districts, 40 Federal and non-Federal Government agencies, and 210 industrial companies. About 70 percent of these are reported to fall in the small business category.

The Federal Reserve System reports that approximately 73 percent of the number and 19 percent of the amount of loans authorized were to borrowers having less than 500 employees, including employees of affiliated concerns under common ownership or control; 57 percent of the number and 12 percent of the amount were to borrowers having assets of under $1 million.

The Atomic Energy Commission reports that small business concerns are participating in a majority of the contract actions which are suitable for small business and are receiving a substantial number of dollar volume of the related subcontract awards. It is stated in the report that this is evidenced by the fact that 39.3 percent of the $550 million in total AEC subcontract dollars went to small business during the fiscal year 1958.

The net value of military prime contract procurement actions in the United States is reported by the Department of Defense at $21,826,740,000 for the fiscal year 1958, of which small firms received $3,729,018,000, or 17.1 percent of the total. Under the joint set-aside program of the Small Business Administration and the Department of Defense, partial or total prospective procurements set aside exclusively for bids by small business concerns amounted to over $1 billion in the fiscal year 1958, a reported increase of 45 percent over the amount set aside in the previous year. The Department of Defense states that, for the first time, statistics on civil works prime contracts

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of the Corps of Engineers became available. It is reported that small business obtained 46.7 percent of such awards.

Under section 701 (d) of the Defense Production Act Amendments of 1955, the Office of Defense Mobilization was directed to investigate the distribution of defense contracts with particular reference to the share of such contracts going to small business directly or by subcontract, and to make recommendations for further action to increase the share of procurement going to small business. Recommendation No. 11, made by the Office of Defense Mobilization on February 29, 1956, and mentioned in the sixth annual report of this committee was that—

> representatives of the Small Business Administration should serve as members of a Department of Defense board to review items on the preferential planning list to determine which items can or cannot be produced by small business.

On December 6, 1957, the Director of ODM designated the Administrator of the Small Business Administration as a member of the Defense Mobilization Board (subsequently changed to the Civil and Defense Mobilization Board).

It is reported that the Small Business Administration has been cooperating on a continuous basis with the Office of Civil and Defense Mobilization in the development and operation of a damage assessment program. The Small Business Administration also reports that it is serving on a Civil and Defense Mobilization Board committee studying a proposed community industrial mobilization plan under which alternate production sources would be established throughout the United States in small communities. This agency is also represented on other OCDM committees, including those concerned with planning and programming for Operation Alert. It is further reported that the Small Business Administration always has a representative on a continuous basis at the OCDM relocation site during Operation Alert, both for routine operations and for briefing Government officials as to the status of small business.

In the seventh annual report it was stated that although it was understood that the recommendation had not been carried out specifically, a liaison representative had been invited to participate with the Department of Defense. The Small Business Administration currently reports that a representative is assigned to the Department of Defense to help achieve greater coordination of the small business programs of the two agencies. It is stated that the representative participates in conferences and in the preparation of directives relating to small business policies of the Defense Department and the three military services. SBA reports that Defense officials have given the liaison officer excellent cooperation and that his participation at the policy level of the Defense Department has resulted in a number of changes beneficial to small business. The SBA representative participates with the policy level officials of the Department of Defense by reviewing proposed policies, instructions, procedures, and implementations that affect small business and makes recommendations with respect to such proposals.

Dispersal

The policy of Congress to encourage the geographical dispersal of industrial facilities was set forth in the language of the 1956 amendments to the Defense Production Act as follows:

> In order to insure productive capacity in the event of such an attack on the United States, it is the policy of the Congress to encourage the geographical dispersal of the industrial facilities of the United States in the interest of the national defense, and to discourage the concentration of such productive facilities within limited geographical areas which are vulnerable to attack by an enemy of the United States. In the construction of any Government-owned industrial facilities, in the rendition of any Government financial assistance for the construction, expansion, or improvement of any industrial facilities, and in the procurement of goods and services, under this or any other act, each department and agency of the executive branch shall apply, under the coordination of the Office of Defense Mobilization, when practicable and consistent with existing laws and the desirability for maintaining a sound economy, the principle of the geographical dispersal of such facilities in the interest of national defense. Nothing contained in this paragraph shall preclude the use of existing industrial facilities.

During the 85th Congress bills were introduced calling for semiannual reports to the two Houses of Congress from the executive branch of the Government on dispersion of industry. The Banking and Currency Committee of the Senate, in commenting on these bills, made the following observation:

> The committee expects the Joint Committee on Defense Production to keep in touch with activities in the field of dispersal and to review carefully the reports which will be made by the Office of Defense Mobilization.

For 3 years this committee has requested all departments and agencies reporting to the committee to include in their reports the progress, if any, made in carrying out the policy of Congress as stated in the dispersion amendment to the Defense Production Act. In the seventh annual report this committee recommended that the Office of Defense Mobilization review the results of Operation Alert 1957 in the light of determining the advantages or disadvantages of dispersion in the event of an attack. No report has been made to date on this recommendation of the committee.

On October 24, 1958, the Director of the Office of Civil and Defense Mobilization forwarded to the chairman of this committee a copy of the National Plan for Civil Defense and Defense Mobilization. The plan contains the following references to dispersal:

> Consistent with resources available or to be made available, and in conformity with established national policy, each government (Federal, State, and local) will supplement individual and family preparations by planning and executing programs related to—
>
> (2) Hardening, dispersal, and duplication of essential production distribution and service facilities.

The Federal Government will contribute to the reduction of the vulnerability of the national industrial plant to overt or covert enemy action through programs for—

1. Physical protection, including dispersal of industrial facilities;
2. Continuity of industrial management during emergency;
3. Maintaining multiple sources of supply for mobilization requirements.

In the annex to the national plan the following language is used:

Annex 11—Protection of essential facilities.—Government and non-Government activities for the physical protection of essential facilities. Includes methods of protection (hardening, dispersal, duplication), criteria for determining essentiality, and requirements for protection. As used in this annex "facilities" can include industrial, commercial, financial, educational, and governmental establishments, hospitals, utilities and terminals.

Defense Mobilization Orders I–18 and I–19 of January 11, 1956, are still in effect, at least in substance. These orders, together with the national plan aforementioned, state the dispersion policy of the executive branch of the Government. DMO I–18 delegated from ODM to FCDA responsibilities for the reduction of urban vulnerability. Now that ODM and FCDA are one office, this responsibility is in the new office. DMO I–19 is somewhat similar to the dispersion amendment to the Defense Production Act and states the policy of favoring geographical dispersion of industrial facilities. The stated exceptions on the face of the order regarding enforcing dispersion are rather broad. They are:

1. "When appropriate."
2. "Insofar as practicable."

It was stated in the report on Project East River and has been stated elsewhere on numerous occasions that if the Government itself did not take the lead in dispersing its own buildings, it could not expect industry to undertake voluntarily the dispersion of its facilities. In the national plan for civil and defense mobilization it is stated that Government activities for the protection of essential facilities can include governmental establishments. To assess what has been done by the Federal Government along the lines of dispersing its buildings, this committee requested a status report from the Office of Defense Mobilization on proposed construction in critical target cities. The report was made by the General Services Administration to ODM under date of March 21, 1958, and included determinations on projects approved for construction under the provisions of the Public Buildings Purchase Contract Act of 1954 as well as determinations of agencies to be housed in special purpose buildings for which the General Services Administration performs engineering and architectural services. The report follows:

Approved projects for new construction in critical target cities

Building	City and state	Agencies to be housed
Courthouse, Federal office building	Brooklyn, N. Y.	Courts.
Do	do	Justice.
Do	do	Treasury.
Federal office building	Toledo, Ohio	Agriculture.
Do	do	Civil Service.
Do	do	Federal Mediation and Conciliation Service.
Do	do	Housing and Home Finance.
Do	do	Health, Education, and Welfare.
Do	do	Railroad Retirement Board.
Do	do	Selective Service.
Do	do	Treasury.
Courthouse, Federal office building	Dallas, Tex	Agriculture.
Do	do	Central Intelligence Agency.
Do	do	Civil Service.
Do	do	Courts.
Do	do	Defense.
Do	do	Federal Mediation and Conciliation Service.
Do	do	General Accounting Office.
Do	do	Health, Education, and Welfare.
Do	do	Housing and Home Finance.
Do	do	Interior.
Do	do	Interstate Commerce Commission.
Do	do	Justice.
Do	do	Labor.
Do	do	Railroad Retirement Board.
Do	do	State.
Do	do	Tax Court of United States.
Do	do	Treasury.
Do	do	Veterans' Administration.
Communicable Disease Center	Atlanta, Ga	Health, Education, and Welfare.
OASI Building	Baltimore, Md	Do.
National Institutes of Health	Bethesda, Md	Do.
Howard University	Washington, D. C	Do.
St. Elizabeths Hospital	do	Do.
Gallaudet College	do	Do.
Veterans, Administration Office Building	do	Do.

Leases involving new construction

Building	City and state	Agencies to be housed
CAA Control Center	Fort Worth, Tex	Commerce.
Do	Indianapolis, Ind	Do.

Agency certifications of compliance with DMO–I–19 for proposed construction in critical target areas

Agency	State and city	Net agency space (square feet)	Determination by agency
Agriculture	Toledo, Ohio	4,120	Functions are of a nature such as will not permit the use of a dispersed location.
	Dallas, Tex	19,310	Do.
Central Intelligence	do	200	Could not effectively accomplish mission from a dispersed location.
	Langley, Va	1,056,871	
Civil Service	Toledo, Ohio	2,250	Functions are of a nature such as will not permit the use of a dispersed location.
	Dallas, Tex	17,550	
Courts	Brooklyn, N. Y	75,334	The nature of the court activities is such that it is necessary to locate them in urban centers rather than in dispersed locations.
	Dallas, Tex	26,935	
Defense	do	82,051	While it is possible that the operations and activities designated for occupancy in this facility can be accomplished at a dispersed location, the objectives and missions of the designated activities make it important that they be located in the proposed project.
Federal Mediation and Council Service	Toledo, Ohio	1,200	Functions are of a nature such as will not permit the use of a dispersed location.
General Accounting Office	Dallas, Tex	[1] 4,200	It is possibe for functions to be carried out from a dispersed location.
Health, Education, and Welfare	Toledo, Ohio	6,330	For economic, operational, and administrative reasons it is important that functions be carried out in a more central location than a dispersed site will offer.
	Dallas, Tex	44,503	
	Atlanta, Ga.: Communicable Disease Center	193,177	Nature of activity is such as not to permit a dispersed location.
	Baltimore, Md., OASI	917,159	Although it is possible for these functions to be carried out from a dispersed location it would be important that these functions be carried out in the proposed location.
	Bethesda, Md., NIH	[2]	Functions are of a nature such as will not permit the use of a dispersed location.
	Washington, D. C.:		
	Gallaudet College	[2]	
	St. Elizabeths Hospital	[2]	Although it is possible for these functions to be carried out from a dispersed location it would be important that these functions be carried out in the proposed location.
	Howard University	[2]	
Housing and Home Finance	Toledo, Ohio	700	Functions are of a nature such as will not permit the use of a dispersed location.
	Dallas, Tex	25,340	
Interior	do	[1] 5,825	The functions of the Bureau of Mines which are intended to be performed in the proposed building could be carried out from a dispersed location.
Interstate Commerce Commission	do	1,050	While it is possible that the operations and activities designated for occupancy in this facility can be accomplished at a dispersed location, the objectives and missions of the designated activities make it important that they be located in the proposed project.

See footnotes at end of table.

Agency certifications of compliance with DMO–I–19 for proposed construction in critical target areas—Continued

Agency	State and city	Net agency space (square feet)	Determination by agency
Justice	Brooklyn, N. Y.	28,630	Would be bound to perform its duties in places of holding court and in jurisdictional boundaries determined by existing law.
	Dallas, Tex.	7,120	
Labor	do	12,525	Space for functions should be continued in the city of Dallas.
Railroad Retirement Board	Toledo, Ohio	600	Although it is possible for these functions to be carried out from a dispersed location it would be important that these functions be carried out in the proposed location.
	Dallas, Tex.	8,015	
Selective Service	Toledo, Ohio	2,840	Functions are of a nature such as will not permit the use of a dispersed location.
State	Dallas, Tex.	400	Utmost importance that function be housed in proposed centralized building.
Tax Court of United States	do	2,100	The functions of the court could be conducted from a dispersed location, however, it is important and advisable that its trial work be carried out in the proposed building.
Treasury	Brooklyn, N. Y.	151,710	Although it is possible for functions to be carried out from a dispersed location it would be important that functions be carried out in the proposed building.
	Toledo, Ohio	54,800	
	Dallas, Tex.	156,734	
Veterans' Administration	do	53,212	Functions are of a nature such as will not permit the use therefor of a dispersed location.
Total net agency space in target areas.		2,952,766	

[1] Total net agency space at dispersed locations, 10,025 square feet.
[2] Because of special nature of the space, figures on net areas are not available.

Agency certifications of compliance with DMO I–19 for proposed construction under lease in critical target cities

Agency	State and city	Net square feet	Determination by agency
Commerce	Fort Worth, Tex.	[1] 45,000	Location is adequately dispersed.
	Indianapolis, Ind.	[1] 45,000	Dispersed location cannot be used for the facility.

[1] Approximately.

It will be noted that the report indicates a total of 2,952,766 square feet of space approved for construction in target areas, and a total of 10,025 square feet for dispersed locations where a waiver was not applied under the usual heading of "Functions Are of a Nature Such as Will Not Permit the Use of Dispersal Location," or words to that effect. The report was based on determinations by agencies wherein DMO I–19 was invoked and applied or waived. Thus it was not a complete report on all construction and proposed construction throughout the Nation in dispersed as well as in target areas because

DMO I–19 was not invoked for a determination when the proposed construction was in a dispersed location. The Public Buildings Service reports that there was some construction initially proposed in dispersed areas during the time covered by the aforementioned report; that square footage figures might be small by comparison since dispersed construction is usually smaller than large city construction; and that complete comparative figures at this time are not available.

Current reports from departments and agencies of the Government to this committee indicate that while there is an awareness of the dispersion policy, very little progress has been made during the past year in reducing the vulnerability of Federal facilities. The report from OCDM stresses the Federal emergency relocation program in the field of reduction of vulnerability and then states that very little progress otherwise has been made.

The Atomic Energy Commission completed its dispersed headquarters at Germantown, Md., and moved there during January 1958.

With respect to the Department of Defense, its own policy calls for the construction of alert facilities, dispersed facilities or shelters, as required, to assure that at least minimum essential operational missions can be carried out under anticipated conditions of attack. Whether the method of protection be dispersion or otherwise depends upon the characteristics of the weapons system involved and its strategic importance. Insofar as nontactical functions or personnel generally are concerned, it is reported that the policy is to provide protection comparable to that provided for the population as a whole.

The number of dispersion inquiries received by the Office of the Assistant Secretary of Defense from the Office of Area Development during 1958 (September 1, 1957 to August 31, 1958) was 286. This is practically the same as for the similar period the previous year when 233 such inquiries were received. These inquiries deal with the proximity of key industrial facilities to major military installations. It may be noted that there was a substantial increase in inquiries received from private industry (from 63 to 127) during the period from September 1, 1957 through August 31, 1958, despite the fact that tax amortization inquiries were rapidly diminishing (from 73 to 5) due to the curtailment of the scope of the tax amortization program.

The Office of Area Development of the Department of Commerce was assigned specific dispersion responsibilities under Defense Mobilization Order I–19. These included providing guidance and assistance to departments and agencies of the Federal Government to industry, and to public and private persons and organizations in the application of the dispersion policy.

In its counseling function the Office of Area Development provided dispersion advice during the calendar year 1957 on 219 sites located in 38 States. During the period from January 1, 1958, to September 1, 1958, it provided advice on 87 sites for private industry, 44 sites for Government facilities, and 4 sites for Government emergency relocation purposes. In its report to this committee the Department of Commerce reiterated its statement of the need for industrial dispersion and included a chart prepared by the Office of Area Development based on the 1954 census of manufacturers showing concentrations of defense related industries in metropolitan areas. This chart shows that there is a concentration of 72 percent of all defense related in-

dustry in metropolitan areas with 40,000 or more manufacturing employees. For further breakdowns the chart indicates that 62 percent of all such industries are in areas of 60,000 or more employees, 52 percent in areas of 100,000 or more employees, and 41 percent in areas of 250,000 or more employees. With respect to various industries there are heavier concentrations. For example, in the field of instruments and related products, 71 percent of the facilities are located in areas of 100,000 or more employees. With respect to electrical machinery, 59 percent of the facilities are located in areas of 100,000 or more employees and 48 percent in areas of 250,000 or more employees.

The Civil Aeronautics Administration discloses by its report that it has underway a program for constructing new buildings to house its air route traffic control centers, which are the principal control points of the Federal Airways System. It is obtaining advice from the Office of Area Development on dispersion regarding these centers. The announced policy is that within the vicinity of the larger traffic hubs the new centers will be located in dispersed locations, that is, outside of the zones of probable damage of critical target areas wherever it is practicable to do so. Protective measures other than dispersion and protective construction for center buildings will be pursued further, such as alternate circuity, definite plans for transfer of control to undamaged centers, and the practicability of standby centers of skeletal capacity at other CAA facilities.

The report of the Maritime Administration states that continuity of production and dispersal of industry are prime considerations in connection with programs dealing with ship construction, new shipyard sites, the maintenance of the national defense reserve fleets, storing of marine supplies and equipment and the execution of industrial procurement allocation agreements with private industry. In the latter connection the report states that allocations are being initiated at an accelerated pace in machine shops, foundries, and factories in rural areas.

Tax Amortization Program

In addition to the DPA borrowing authority fund, the accelerated tax amortization program (sec. 168 of the Internal Revenue Code) has provided an incentive to eliminate critical deficiencies by encouraging industry to expand supplies of strategic materials for defense production and stockpile acquisitions. Starting early in the Korean war, ODM established a total of 229 expansion goals as the basis for measuring the deficit between estimated defense requirements and industry's capacity to meet the demand. During the past 3 years the mobilization program reached a point where most of these expansion goals were completed or terminated and those remaining were required primarily for the expansion of selective materials or products peculiarly essential to defense. By the end of 1957 only 4 goals remained open. These were goal No. 206, research and development laboratories (defense); goal No. 224, production facilities for military and AEC procurement programs; goal No. 227, roll-on-roll-off ships; and goal No. 229, liquid oxygen and liquid nitrogen.

From the beginning of the program through June 30, 1958, the total number of certificates of necessity issued to industry and outstanding for accelerated tax amortization against these expansion programs

amounted to 22,018, representing a capital investment of $38.2 billion of which $23.1 billion was eligible for fast writeoffs. More than 40 percent of the certificates (an estimated 11 percent by value) have gone to small business.

During the 85th Congress several bills were introduced which were designed to place a more restrictive interpretation on the meaning of national defense than that applied by the delegate agencies in certifying the essentiality of projects under the tax amortization program. On August 26, 1957, Congress enacted Public Law 85–165 limiting the certifying authority to facilities to produce new or specified defense items or to provide research, development, or experimental services for the Department of Defense or for the Atomic Energy Commission as a part of the national defense program. The Senate Finance Committee's Report No. 836 clearly stated that the above language eliminated completely the use of rapid tax amortization to encourage the construction of facilities to produce civilian articles which might, at some future time, be important for defense purposes or defense items of a routine character, such as standard-size shells or standard-design rifles. The report indicated that the tax amortization program should be limited in the future to producing facilities for defense items or components which are sufficiently new or specialized to require construction of new and different facilities. In issuing revised regulation 1A (February 26, 1958), ODM clearly stated that certification will not be granted where it can be shown only that existing facilities are inadequate or unavailable for the required rate of production.

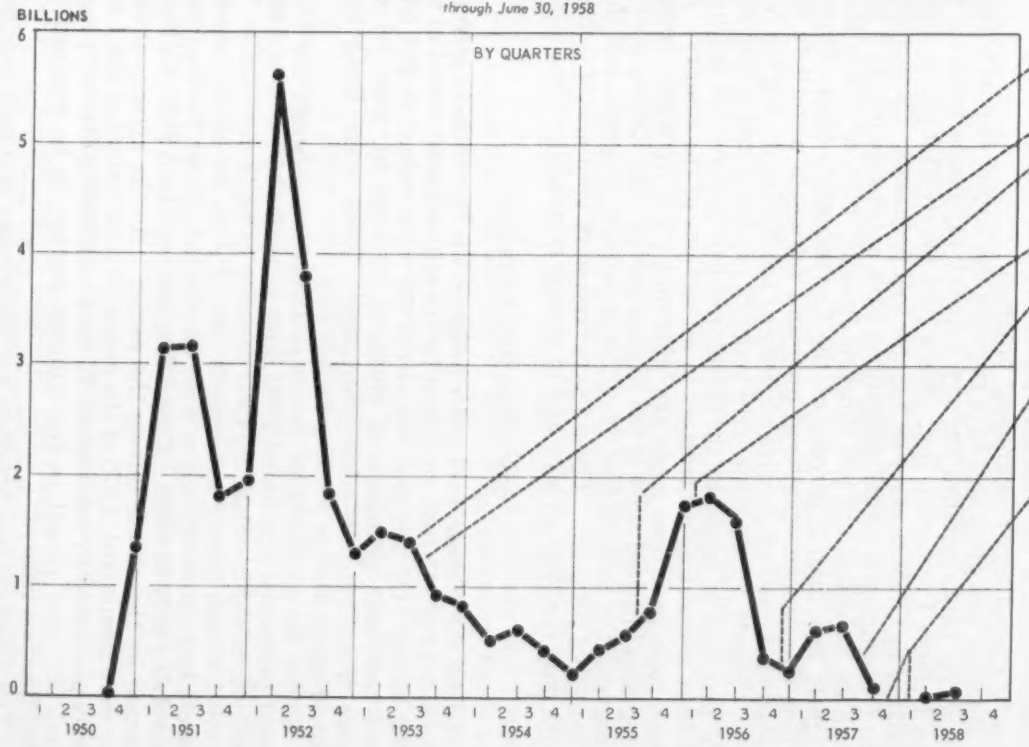
On March 4, 1958, when ODM regulation 1A was published in the Federal Register, there were 329 applications pending. The four expansion goals remaining open under the previous program were closed March 31, 1958. Applications pending on August 22, 1957, the effective date of the new law, and those filed thereafter must conform to ODM Regulation 1A. From June 6th through August 8, 1958, 32 certificates totaling $36,097,667 were granted. Most of these certificates were for facilities for research and development. One was for high-energy fuels for missiles and military jet aircraft. Three were for special fire-fighting equipment for missiles. The aircraft industry received five certificates for wind-tunnel facilities for development and testing of military aircraft and missiles.

On August 15, 1958, Congress resolved an executive branch interpretation of the 1957 law excluding from tax amortization certain uranium processing facilities at the site of discovery of ore deposits by expressly authorizing tax amortization for uranium ore processing facilities if the old facilities are inadequate by reason of location. (Public Law 85–866, approved September 2, 1958.) The termination date of the tax amortization program under present law is December 31, 1959.

The following illustrates by graphical comparison the variance in certifications from the beginning of the program.

TAX AMORTIZATION

Total Amount Certified, October 30, 1950 through June 30, 1958



- June 30, 1953 Defense Production Act Amendments (more limited definition of "National Defense").
- July 26, 1953 - Korean armistice.
- August 9, 1955 Defense Production Act Amendments (to reduce time required for full mobilization in event of an attack on the United States).
- January 11, 1956 - DMO policy 1-19 (dispersion of industry policy).
- December 26, 1956 - ODM policy statement restricting tax amortization primarily to Department of Defense and Atomic Energy Commission requirements.
- August 22, 1957 - Tax amortization amendment restricting certificates to facilities for new or specialized items or research for the Department of Defense or Atomic Energy Commission.
- Note: No certificates issued during 4th quarter 1957 and 1st quarter 1958.

Expiration date of law for emergency facilities: December 31, 1959.

Machine Tools

Machine tools continue to be an important factor in the Nation's defense planning. The technical advances in nuclear warfare and related changes in our strategic concept from a 5-year to a 3-year war has presented new problems to the Government in updating its machine tool mobilization programs. These changes have necessitated a reevaluation of the existing expansion type of machine tool programs, which were designed originally to increase the production facilities of the Nation and to assure full production in the minimum time in the event of an emergency. The latest strategic concept has brought about marked reductions in certain M-day requirements, which has raised the question as to the mobilization need for retaining thousands of tools which, at the time they become idle, are not definitely assigned to a future military procurement program.

Machine tool programs have required the largest sum of borrowing authority funds certified for any industry expansion program under the Defense Production Act. Since 1951 nearly $1.6 billion has been certified by ODM to carry on 5 major tool programs. Of this amount, the Government's actual obligations have approximately $1.3 billion, with an estimated net loss through June 30, 1958, of $12 million, or slightly less than 1 percent of the Government's total obligations. These Government-sponsored programs accounted materially for the greatly enlarged productive capacity of the Nation during the Korean war. Nearly 90,000 tools were actually produced and either sold by the producer or leased by the Government to hundreds of defense and defense-supporting contractors in all sections of the country. All of these tools have been made available under 3 Government-sponsored programs initiated early in the Korean period—the Korean pool order program, the toolbuilders' facilities expansion program, and the elephant tool program. These 3 programs have been almost completed, with only the tools on lease and in storage remaining to be liquidated.

COMPLETED TOOL PROGRAMS

Under the Korean pool order program the Government guaranteed the sale of 86,815 tools produced by the toolbuilders, valued at nearly $1.2 billion. Of this total, all except 400 tools, valued at $5.1 million, had been sold to industrial plants as of June 30, 1958 (11 others were transferred to other programs). These were being held in Government storage pending further sale.

Under the toolbuilders' facilities expansion program the Government purchased and leased 2,375 units to toolbuilders, valued at $31.3 million, to aid in enlarging their capacity to build more tools. There were 124 such leasing agreements. As of June 30, all of these agreements had either expired or were terminated, except for 8 agreements involving only 93 tools. Rental fees totaling about $13.8 million were earned by these tools during the period. As the agreement expired or were terminated, 1,970 of the available tools valued at $24.1 million were purchased by contractors, 17 were transferred to other programs, and 295 were placed in Government storage to be retained in the mobilization reserve.

The Elephant tool program was undertaken to supply producers of large size tools with long-lead-time tools which would be available

in standby when needed to produce other large tools. Contracts were entered into with 3 toolbuilders providing for the Government purchase, installation, and lease of 321 units costing nearly $5 million. Some of these tools required as much as 30 months lead-time and ranged in cost up to $300,000. The 3 leasing agreements cover a 10-year period during which the builders are permitted to use the tools for civilian as well as defense work at a rental rate of 1 percent per month of the acquisition cost when actually in use. Through June 30, 1958, the 3 contractors have paid the Government a total of $2.2 million in rental fees. On this basis the Government stands to realize close to its original investment over the 10-year period.

CURRENT TOOL PROGRAMS

The two other Government-sponsored tool programs initiated earlier were the marine turbine and gear program and the M-day pool order program. The former was undertaken to round out the production facilities of the turbine and gear industry to meet the estimated requirements of the Navy and Maritime under full mobilization. Although extensive negotiations were carried on for several months during 1956 and 1957 with three of the large turbine and gear producers, ODM and GSA concurred late in 1957 that the program should be deferred pending a reappraisal of the shipbuilding requirements in the light of the latest strategic concept. Further action, if any, with respect to this program awaits the submission of revised requirements and their relationship to the industry's capacity to meet the estimated demand in an emergency.

Of the 5 machine tool expansion programs sponsored by the Government, only 1 remains currently active. This is the M-day pool order program. It is designed as a standby program to assure that the production facilities of toolbuilders available on M-day can be immediately "triggered" by the Government without delay to turn out new machine tools needed for the production of military end items. ODM has authorized $21 million of borrowing authority funds to finance this program, of which $18 million is available for working capital advances and the remaining $3 million to cover the probable ultimate net cost to the Government. At the end of June 1958 a total of 93 contracts had been tendered to tool producers for nearly 15,350 tools, valued at $237 million. Eighty-three of these contracts, involving 14,713 items costing $214.5 million, have been accepted by the Government. As in the Korean pool order program, the Government guarantees the sale of the tools listed on the contract schedules. No actual production, advances, or expenditures will occur until the program is "triggered" by Government notice to the producers. Such notice will be given only if the situation, as it exists at that time, indicates the need for the particular type of tools specified in each contract.

TOOL REPLACEMENT AND MODERNIZATION PROGRAM

In the sixth annual report (January 1957) your committee called attention to the failure of the three services to utilize most of the funds appropriated by Congress and made available through the Department of Defense for the replacement and modernization of

machine tools owned by the individual services. The Department of Defense has recognized the importance of a long-range modernization program, and as early as 1953 concurred with ODM's recommendation to request specific funds from Congress for this purpose. The Congress responded by appropriating to the Department of Defense, for allocation to the services, a total of $450 million specifically earmarked for replacements during fiscal years 1954 through 1956, but only $15.4 million of this amount was actually obligated in the 3-year period—$14.3 million by the Navy, $1.1 million by the Army, and nothing by the Air Force. When it became obvious that little progress was being made in carrying out this program, DOD and ODM announced a revised policy designed to meet the objections of the services. Under the revision each service was expected to budget for its own tools, including those needed for current programs, mobilization reserves, and replacement purposes. At that time the question was raised by your committee as to whether this new approach would result in adequate funds being made available for tool replacement in the face of other budgetary demands unless the funds were specifically earmarked for such tools. To meet this situation the Department of Defense, on September 21, 1956, issued directive No. 4215.2, stating that an active replacement program was to be pursued by each of the armed services leading to the development of a uniform DOD replacement program. This directive specified that, effective with the 1958 budget estimate, the services were to include an annual request ranging from 2 to 5 percent of the acquisition cost of the tools listed in each department's inventory, such funds to be properly identified and not reprogramed for other uses. Pursuant to this directive, the Air Force included $33 million and the Navy $16.7 million in their 1958 budgets. Of these amounts, the Air Force obligated approximately $1 million and the Navy $7 million during the fiscal year 1958. The Army, which accounts for nearly 93,000 Government-owned tools, did not follow the DOD directive and placed no request for replacement funds on the basis that any appropriated funds made available were needed for programs of higher priority.

The pattern followed by the services for the fiscal year 1959 was similar in that the Air Force and the Navy followed the DOD directive by requesting $20 million and $21.6 million, respectively, for replacement purposes and the Army requested no specific funds for the second year to modernize their tools. Moreover, it is reported that preliminary to preparing the 1960 budget requests, the Army asked to be relieved from complying with the DOD directive. It is understood that this request was denied by the Assistant Secretary of Defense (Supply and Logistics) with instructions that specific replacement funds should be included by the Army in its 1960 estimates.

From the foregoing it is clear that the armed services have done little since the end of the Korean fighting to undertake the replacement or modernization of thousands of Government-owned tools that are actually in use, even though the records show that 40 percent of the tools are now over 12 years old.

Your committee feels that it is in the interest of national defense for each of the services to keep its inventory of tools modern and to reduce overall costs by taking advantage of the advanced efficiency and increased productivity of newer and improved machine tools.

The Secretary of Defense is urged to take the necessary action to insure that each service makes adequate provision annually in its fiscal planning for the modernization of its tools.

GOVERNMENT INVENTORIES

The Government-owned tools reported in use in Government and private industrial facilities or held in storage are estimated to total over 300,000 units. The original acquisition cost of these tools is estimated at about $3.2 billion. Of this total, the Department of Defense had cataloged through its central inventory system the condition, age, and location of 276,794 units as of December 31, 1957. This is somewhat less than the quantity reported in the last annual report due to adjustments in catalog classifications and the increased number of tools declared excess and disposed of as surplus under the policy effectuated as the result of changes in the strategic concept. In addition to the total cataloged, there are several thousand uncataloged tools currently in the supply complex of the military services throughout the world and 30,200 tools (latest report) owned by the Atomic Energy Commission; Maritime Administration; the Department of Health, Education, and Welfare; and the General Services Administration.

At the end of December 1957 the 276,794 machine tools were divided among the armed services as follows: Army, 92,939 items with an original acquisition cost of over $1 billion; Navy, 102,096 units valued at a cost of $1.1 billion; and the Air Force, 81,759 tools with a cost valuation of slightly over $1 billion. As of September 20, 1958, records indicate that approximately 200,000 of these cataloged tools are still being actively used in Government facilities and by private contractors for defense production, with the remaining 76,000 tools being held by the 3 services in idle inventories as packaged units, standby lines, or unassigned reserves. Under the current policy, tools which are not assigned to a definite procurement program are declared excess by the services and consideration is given as to their placement in the national industrial reserve or disposal as surplus tools.

NATIONAL INDUSTRIAL EQUIPMENT RESERVE

As of January 1958 nearly 4,750 machine tools and related production equipment units, with an acquisition cost of $15 million, were being held in the national industrial equipment reserve (NIER) (Public Law 883, 80th Cong.) under the jurisdiction of GSA (Federal Property and Administrative Services Act of 1949, as amended). Approximately 2,000 pieces of this inventory consist of general purpose tools which the Department of Defense has transferred to NIER to be leased by GSA for defense supporting activities. These tools are warehoused at two storage sites, Burlington, N. J., and Dixon, Ill., at a cost of about $600,000 for the fiscal year 1958. This includes transportation, processing ,testing, dehumidifying, building alterations, and warehousing. As of June 30, 1958, GSA had 66 NIER tools under 19 leasing agreements. Under the terms of the agreements the lessee is privileged to use the tools during the lease period for nondefense as well as defense work.

In enacting Public Law 883, the 80th Congress stated in the declaration of policy:

> In enacting this act, it is the intent of Congress to provide a comprehensive and continuous program for the future safety and for the defense of the United States by providing adequate measures whereby an essential nucleus of Government-owned industrial plants and a national reserve of machine tools and industrial manufacturing equipment may be assured for immediate use to supply the needs of the Armed Forces in time of national emergency or in anticipation thereof; it is further the intent of the Congress that such Government-owned plants and such reserve shall not exceed in number or kind the minimum requirements for immediate use in time of national emergency, and that any such items which shall become surplus to such requirements shall be disposed of as expeditiously as possible.

For several years prior to 1957, the number of tools declared excess by the services as defense contracts terminated ranged between 7,000 and 9,000 annually. Since many of these were special tools, the majority were disposed of as surplus after first being made available to each of the services and other Federal agencies. On the average, between 400 and 500 of the general purpose tools were selected annually by the Department of Defense for transfer to NIER. For the year ending June 30, 1958, 528 tools were placed in NIER.

Starting in 1957 this situation changed. The nuclear concept and the change in strategic planning from a 5-year to a 3-year war materially reduced certain programs for military items and the need for retaining the related tools used in the production of such items. By late 1957 it became apparent that the quantity of tools likely to be declared excess and the number that would be available for the national reserve in the 3 to 5 years ahead would be far greater than recent years.

On February 19, 1958, the Director of ODM appointed an interagency task group to assist in establishing guidelines to be followed in considering the extent to which excess tools should be placed in Government reserve and held for emergency use in the reconstruction or rehabilitation of essential industries in case of an attack, as well as for direct defense production in case of a limited war.

On the basis of the estimates prepared at the time, GSA provided budgetary funds for the storage and processing of the normal addition of 400 to 500 units to NIER during the 1959 fiscal year. On March 11, 1958, the Director of ODM advised the Administrator of GSA that declarations of excess by the services were estimated to run as high as 12,000 tools per year (later increased to 25,000) for the next 3 years and that the Department of Defense estimated that NIER selections from these excesses might run as high as 5,000 items per year. (During the 3-month period from July 1 to September 30, 1958, 7,711 tools were declared excess, and 1,127 were selected for NIER.) In view of these developments, the Director of ODM wrote the Administrator of GSA on June 23, 1958, recommending that GSA request increased funds for the processing and storage in the magnitude of 5,000 tools rather than the 400 to 500 initially covered in the 1959 budget estimates.

On June 9, 1958, the President requested Congress to authorize a supplemental appropriation totaling $3.5 million "to finance the cost of maintaining an unanticipated increase in a reserve of machine tools and manufacturing equipment." In voting out the bill the House Committee on Appropriations approved only $1.5 million of the requested amount and did not allow funds for activating a new warehouse for the storage of tools. The report added that the committee was doubtful of the value of the present machine-tool program and was going to call for an investigation. Both DOD and ODM supported GSA in the essentiality of this program, and the Senate Committee on Appropriations approved GSA's request for $3.5 million. This full amount was finally agreed upon at the House-Senate conference except for certain reductions in other GSA requests which may affect the total fund actually made available for tools. GSA officials have advised the committee staff that adequate funds will be provided from the supplemental budget for the processing and storage of up to 5,000 additional tools during fiscal 1959.

Since indications are that thousands of Government-owned tools will be declared excess over the next 3 to 5 years, it is evident that adequate provisions will have to be made in fiscal planning to provide for the storage of that portion of those tools which are selected annually for retention in the Government reserve. Otherwise, such tools would be subject to being disposed of as surplus items.

THE SCHOOL-TOOL PROGRAM

Under the Federal Property and Administrative Services Act of 1949, as amended, the Department of Health, Education, and Welfare has delegated authority to assign surplus Government property to colleges, vocational schools, and other institutions for educational purposes. Under the established procedure such assignments are donated to the States, which, in turn, reassign the property to the individual schools. For the first 4 years the Government retains title to the tools, after which title passes to the school. During the 4 years the Government makes periodic checks to assure that the objectives of the program are being met.

When it became evident, early in 1958, that thousands of the machine tools were to be declared excess over the next 3 years, and subject to surplus sales, a determined effort was made by BDSA, together with HEW and other interested agencies, to preserve as many of these tools as possible for future mobilization and postattack needs by increasing the flow to the Nation's institutions for training purposes.

For several years HEW has selected tools from available lists of surplus tools and allocated them for reassignment to eligible institutions. In the past 2 years nearly 3,000 surplus tools have been made available to schools in this manner—1,236 in 1956 and 1,700 in 1957. It is estimated that there are about 800 colleges, 750 vocational schools, and many thousands of secondary and other schools throughout the Nation equipped with adequate facilities to use such tools. From a survey completed in June by HEW, these schools indicated a current requirement in excess of 108,000 machine tools. It is estimated that approximately 20,000 to 25,000 tools are presently being operated by the schools in their educational programs. With the

revised procedures recently developed by HEW, DOD, and GSA. HEW has been able to step up its allocations substantially. In July an allocation of over 1,200 tools was achieved as compared with 1,700 for the entire year of 1957, and for the first 7 months of 1958 the total was 3,905. The Director of OCDM has appointed an interagency task group to assist in coordinating the overall program so that tools will not be declared available for disposal by the military services at a more rapid rate than the allocations can be absorbed by the educational institutions. It is anticipated that in this way surplus sales of general purpose tools will be held to a minimum. Tools donated to schools for vocational and technical training of young men is an effective way of strengthening our defense readiness and at the same time retaining the tools in a reservoir, should the Government have need of them in any future emergency. The cost of the program should be small in comparison with the results to be achieved, for the Government has experienced a low average return from sales of surplus tools.

Under Public Law 883, 80th Congress, the Secretary of Defense may authorize, in the interest of national security, the lending of machine tools stored in the NIER to any nonprofit educational institution free of charge except for transportation and maintenance. A pilot operation is being initiated under this authority in which a complete complement of about 30 tools (not available under the HEW school program) is being loaned by DOD out of the NIER to a State industrial training school. It is planned to make similar loans providing this experiment proves successful. This program also provides increased quantities of tools for future needs without incurring maintenance and storage costs.

UNIFORM LEASING PRACTICES

Beginning with the fourth annual report (1954), your committee has pointed out in each succeeding report, the inequities arising from the lack of uniformity in the leasing practices followed by the armed services in furnishing Government-owned tools to defense contractors and has urged remedial action. The seventh annual report, issued January 16, 1958, indicated that although considerable progress has been obtained through 2 years of conferences by the interagency task group, it was not until October 1, 1957, that the Director of ODM found it practical, primarily because of DOD's objections, to issue DMO VII–4, amendment 3, establishing uniform standards for the following contract provisions: terms of lease, purchase option, renewal option, maintenance, installation charges, transportation and removal costs, rebuilding and overhaul costs and statement of rental consideration. ODM's initial action with respect to revised leasing standards was set forth in Directive DMO VII–4, amendment 2, dated June 19, 1957, which established uniform rental rates for all Government agencies leasing machine tools.

Early in December, after 60 days had elapsed and it was apparent that the ASPR (Armed Services Procurement Regulation) Committee had reached no basis of agreement with the 3 services for carrying out DMO VII–4, amendment 3, the Director of ODM suggested to the Assistant Secretary of Defense (Supply and Logistics) that a study be undertaken to determine (1) the extent the new leasing policies were being carried out, (2) which of the revised policies were found to be unworkable by the services, and (3) action to be taken toward the implementation or further revision of the newly established interagency standards.

When the revised rental consideration policy proved to be the principal cause for the continued delay for agreement among the departmental representatives on the ASPR Committee, the Deputy Assistant Secretary of Defense (Supply and Logistics) wrote the Assistant Secretaries of the armed services on February 20, 1958, requesting that contracting officers implement the policy of ODM by providing for the documentation of the rental consideration pending final revision of the procurement regulations. This provided that a statement be included in each contract or contract file specifying the dollar amount of the rent to be paid whether such payments are made in cash or are in the form of compensatory offset against the end product price.

On March 20, 1958, a preliminary draft of the revised regulations prepared by the ASPR Committee was reviewed with ODM and, although differences were resolved fairly promptly, it was not until September 18, 1958, that the new regulations were actually issued to the military departments for transmittal to the contracting officers.

The issuance of this regulation follows about 4 years of continuous effort on the part of your committee and its staff to effect the establishment of uniform practices throughout the armed services and other Government leasing agencies. It is the hope that the new standards will aid materially in helping to eliminate unfair competitive advantages where Government-owned tools are furnished to defense contractors. Your committee again recommends, as it did a year ago, that the General Accounting Office review procurement contracts from time to time to determine (1) that no undue competitive advantage has been conferred on one contractor over another; (2) that the Government has received proper consideration for the use of the tools, and (3) that a statement has been included in the contract or the contract file specifying the periodic amount of rental to be paid, either in cash or through an adjustment of the end-item price.

Aluminum Imports

In the seventh annual report this committee recommended that the General Services Administration file with this committee reports setting forth information on production, sales and utilization, and such other information as shall be necessary to determine whether Government purchases of aluminum have increased due to imports.

Beginning in 1950, under authority of the Defense Production Act, the Government entered into domestic aluminum supply contracts. Of the 10 domestic expansion contracts, 2 were with the Aluminum Company of America, 4 with the Kaiser Aluminum & Chemical Corp., 3 with the Reynolds Metals Co., and 1 with the Harvey Machine Co. The contracts provided for the construction of new facilities having the capability of producing the quantities of aluminum which follow:

	Pounds
Alcoa	2,050,000,000
Kaiser	2,282,000,000
Reynolds	1,800,000,000
Harvey	540,000,000

The aluminum companies were to construct new facilities to produce aluminum referred to in the contracts as "additional production." Under these contracts the Government could require the aluminum producers to sell to the Government the additional production until the termination dates. Any quantity of production not disposed of, or not otherwise sold or utilized by the producers, may be tendered to the Government, which provisions are frequently referred to as "put rights." Under these contracts the aluminum companies were permitted to first dispose of the production from facilities not covered by the contracts. The Government agreed to purchase from the companies all of the production of the "additional facilities" not otherwise disposed of by the companies during the 5-year period of the contract, after complying with certain requirements. The contracts also contained language which stated that "the Government does not, by this contract, guarantee or agree to purchase production from other facilities."

Aluminum was first tendered to the Government under these contracts in December 1956. GSA reports that as of June 30, 1958, 1,203,597,278 pounds of aluminum had been tendered to the Government and accepted. GSA reported that as of the same date, the total amount of aluminum which could be tendered to the Government in the future amounted to approximately 189 million pounds from Kaiser and Reynolds and 540 million pounds from Harvey, or a total maximum exposure of approximately 729 million pounds. For the production periods July, August, and September 1958 an additional 73,317,080 pounds were tendered and accepted.

As tenders of aluminum were being made to the Government under the domestic supply contracts, the question was raised as to whether imports of aluminum by two of the aluminum producers would be deducted, or whether these imports should be permitted to increase the quantities of aluminum which the Government would purchase under domestic contracts above the quantities which would have been purchased in the absence of the aluminum imports. This question on imports related to the Aluminum Company of America and the Kaiser Aluminum & Chemical Corp., since these two companies entered into long-term contracts in 1953 for the purchase of aluminum from the Aluminum Company of Canada (Alcan).

The import question was referred to the Comptroller General, and by letter dated September 5, 1957, he stated that it was his understanding that Alcoa and Kaiser had voluntarily offered to modify their contracts to provide for substantial reductions in the quantities of aluminum that the Government would otherwise be required to take under the provisions of the contract. The Comptroller General concluded by stating that he believed there was sufficient doubt regarding the rights and liabilities of the parties in this matter to warrant acceptance of such proposals as being in the best interest of the Government and that no objection to such action would be raised by his Office. The chairman of this committee immediately expressed his disappointment in the ruling of the Comptroller General, and urged the Administrator of the General Services Administration to defer purchases of aluminum until the companies concerned were willing to eliminate all of the aluminum imports. The contracts contained language which stated that "The Government does not, by this contract, guarantee or agree to purchase production from other facilities." Since the facilities out of which imports were produced were not mentioned in the contracts, it would appear that the facilities out of which imports were produced were "other facilities."

Shortly following the public expression of disappointment by the chairman of this committee in the ruling of the Comptroller General and the request made by him to the Administrator of the General Services Administration to defer purchases of aluminum except from companies who were willing to deduct their imports on a 100 percent basis, the Aluminum Company of America and the Kaiser Aluminum & Chemical Corp. made a statement that they would agree "to deduct all the aluminum they imported from Canada from their sales of excessive domestic output to the Government." This announcement was carried in an Associated Press dispatch from New York.

New agreements were executed between the General Services Administration and Alcoa and Kaiser on September 13, 1957. The new agreement with Reynolds did not involve imports but did include a clarification of put right questions, and was executed on September

16, 1957. On September 17, 1957, the General Services Administration issued a press release announcing the new agreements, stating:

> Producers have agreed to limit their put rights by deducting from production the full amount of primary aluminum purchased from other sources.

It also included an explanation of other parts of the agreements which established higher minimum-grade standards for aluminum tendered, a price standard that the price shall be the price at the time of production, and a requirement that the amount of aluminum earmarked for nonintegrated users be increased from 25 to 35 percent.

This committee recommended that the General Services Administration defer purchases of aluminum except from companies willing to eliminate from consideration all their imports. Assuming that all aluminum produced from other facilities is sold or utilized, to eliminate all imports from consideration would have required that sales and utilization and imports be deducted from the production of the Government expanded facilities. Under the committee recommendation, the aluminum remaining after making the above deductions would have been the quantity which could be put to the Government, and the Government purchases would not have been increased because of imports. This committee pointed out in the seventh annual report that it appeared to be the position of the General Services Administration that under the revised agreements puts to the Government could not exceed contract production from the expanded facilities less imports.

In the seventh annual report this committee stated that although it had been indicated by GSA that under the revised agreements there could be a maximum saving of up to $98 million, it is also important to determine whether increased expenditures for aluminum have resulted or may result, because of imports. It was stated in the last annual report that a more complete report on any increased expenditures resulting from imports of aluminum would be submitted at a later date.

The current status of the increased expenditures for aluminum, which has resulted from imports of aluminum as of October 10, 1958, is as follows:

Comparison of aluminum tender rights as affected by imports (based on operations through Oct. 10, 1958)

Tender period	Original contract (with no import limitation)		Under Sept. 13, 1957, amendment with import limitation		Assuming that all imports were deducted	
	Pounds	Value	Pounds	Value	Pounds	Value
ALCOA						
Ending Mar. 31, 1957	250,000,000	$62,500,000	216,000,000	$52,500,000	5,000,000	$1,250,000
Ending Mar. 31, 1958	273,000,000	69,800,500	195,000,000	49,647,040	199,571,000	50,744,080
Starting Apr. 1, 1958	54,000,000	12,960,000				
Tender rights	577,000,000	145,260,500	405,000,000	102,147,040	204,571,000	51,994,080
Decrease in tender rights as compared to original contract			172,000,000	43,113,460	372,429,000	93,266,420
KAISER						
Ending Mar. 31, 1957	85,000,000	21,250,000	78,000,000	19,500,000	37,673,000	9,418,250
Ending Mar. 31, 1958	401,221,000	103,627,840	246,346,293	63,360,340	211,676,000	54,570,128
Starting Apr. 1, 1958	99,817,080	23,956,099	99,817,080	23,956,099	52,590,080	12,621,619
Tender rights	586,038,080	148,833,939	424,163,373	106,816,439	301,939,080	76,609,997
Decrease in tender rights as compared to original contract			161,874,707	42,017,500	284,099,000	72,223,942
TOTAL						
Alcoa	577,000,000	145,260,500	405,000,000	102,147,040	204,571,000	51,994,080
Kaiser	586,038,080	148,833,939	424,163,373	106,816,439	301,939,080	76,609,997
	1,163,038,080	294,094,439	829,163,373	208,963,479	506,510,080	128,604,077
Decrease in amounts available for tender			333,874,707	85,130,960	656,528,000	165,490,362

Comparison of effects of Sept. 13, 1957, amendments

	Savings as compared to original contract assuming no import limitation		Amount and value of imports not deducted from tenders	
	Pounds	Value	Pounds	Value
Based on imports and other purchases:				
Alcoa	172,000,000	$43,113,460	200,429,000	$50,152,960
Kaiser	161,874,707	42,017,500	122,224,293	30,206,442
Total	333,874,707	85,130,960	322,653,203	80,359,402

The chart shown above is dated October 10, 1958. This is the date on which final figures for the tender right-import picture can be based. Alcoa's tender rights ceased in July 1958, and October 10 was the last date on which Kaiser could tender under its contract. Tender rights extend 10 days beyond the end of the month for the production period covered. It will be noted that as of October 10, 1958, Alcoa and Kaiser had tendered under contract rights a total of 829,163,373 pounds of aluminum to the Government. The chart shows further that had all imports by these two companies been deducted from tender rights, this amount would have been reduced by an additional 322,653,203 pounds. Thus it can be stated that the failure of the aluminum producers to agree to deduct all imports from their tender rights as otherwise computed caused the Government to buy 322,653,203 pounds of aluminum, priced in October 1958 at $80,359,402.

With respect to the saving to the Government accomplished by the September 13, 1957, agreements, it should be understood that there has been no saving when the agreements are compared to the original position of the chairman of this committee that the contracts did not as a matter of law include tender rights motivated by imports. Had this view been carried to its full application, it would appear that alleged tender rights of Alcoa and Kaiser would have been reduced by approximately $166 million. The actual saving to the Government in the final analysis, as against the amount that could have been tendered had the interpretation of the companies involved prevailed, was approximately $97 million. This included an $11.5 million reduction in tender rights respecting Reynolds that had no relation to imports. However, the chairman of this committee was gratified to see a limitation agreement voluntarily entered into respecting imports and so stated in a press release issued September 17, 1957. He included in the same release the pertinent statement that the contracts "were never intended to provide an indirect market for surplus Canadian production." His estimate at that time of the saving effected by the agreements was between $75 million and $100 million. On the same date, September 17, 1957, GSA released an estimate of a saving of $98 million against maximum exposure. The following table shows that both estimates were in line with final results, and indicates by companies a total saving of $96,710,960.

Total benefit to the Government under Sept. 13, 1957, agreements

Savings as compared to original contract:	
Alcoa	$43,113,460
Kaiser	42,017,500
Other savings under agreements:	
Alcoa: Reduction of price	200,000
Kaiser: Reduction of price	100,000
Reynolds:	
Reduction of price	50,000
Inventory freeze	1,600,000
Estimated primary purchases	130,000
Estimated pro rata share military set-asides	9,500,000
Total savings under agreements	96,710,960

Since imports have caused a greater outlay of Defense Production Act funds, it may be pertinent to note that the 85th Congress in Public Law 85–686 amended the Trade Agreements Extension Act by adding "economic welfare" considerations to those powers already given the President (and OCDM regarding assimilating data) in determining the extent to which imports are endangering the national security. The amendment provides that the import of foreign competition on the economic welfare of individual domestic industries shall be taken into consideration. Under powers granted by this act the President may take appropriate action to adjust imports when they endanger the national security.

The effect of the noticeable rise in aluminum exports from Soviet bloc countries from 1955 to the present time has been the subject of study by the aluminum industry in this country. Russian exports have been estimated at approximately 1 percent of the free world supply. The antidumping laws of the United States do not apply to a commodity that enters foreign markets but does not come into this country in a provable or direct manner within the scope of those laws. This committee at the present time is aware of no direct imports into the United States of Soviet primary aluminum. There have been allegations that Soviet underpricing in primary aluminum exports of approximately 39,000 tons in 1957, of which nearly half was sold in the United Kingdom, has reflected itself in exports of fabricated aluminum to the American market at prices as low as 20 percent below market price. Other allegations have been made to the effect that Soviet manipulations were somewhat responsible for the spectacular 2 cents per pound price reduction in March 1958 initiated in Canada by Alcan and followed shortly by the industry in the United States in the face of increasing labor costs.

Total imports of primary aluminum in 1957 were 222,158 tons. Estimated imports from trade sources for 1958 are approximately 230,000 tons.

PRESENT STATUS OF ALUMINUM TENDER RIGHTS

As of October 30, 1958, the Government, under Defense Production Act tender right contracts, had accepted 405 million pounds of aluminum from Alcoa, 424 million pounds from Kaiser, and 447 million pounds from Reynolds, as illustrated in more detail by the following chart:

Aluminum supply contracts—Aluminum tenders to the Government and acceptances with respect to production through Sept. 30, 1958

[In pounds]

	Tenders		Acceptances		
	Date	Quantity	Date	Quantity	
Aluminum Company of America	Apr. 2, 1957	250, 000, 000	May 29, 1957 Sept. 13, 1957	100, 000, 000 110, 000, 000	Conditional acceptance ratified Sept. 13, 1957.
Production year ended Mar. 31, 1957		250. 000, 000		210. 000. 000	
	Nov. 5, 1957 Feb. 3, 1958 May 1, 1958	64, 000, 000 64, 000, 000 43, 608, 000	Nov. 15, 1957 Feb. 12, 1958 May 16, 1958	64, 000, 000 64, 000, 000 43. 608, 000	
Production year ended Mar. 31, 1958		171, 608, 000		171, 608, 000	
Production period beginning Apr. 1, 1958	June 3, 1958 July 1, 1958 July 8, 1958	7, 522, 000 11, 131, 000 4, 739, 000	July 2, 1958 July 14, 1958 July 22, 1958	7, 522, 000 11, 131, 000 4, 739, 000	
		23. 392, 000		23. 392, 000	
Total, Alcoa		445. 000, 000		405. 000, 000	
Kaiser Aluminum & Chemical Corp	Dec. 10, 1956 Jan. 9, 1957 Mar. 8, 1957 Apr. 10, 1957	20. 000, 000 30, 000, 000 20, 000, 000 15. 000, 000	Jan. 8, 1957 Feb. 20, 1957 Apr. 2, 1957 June 10, 1957	20. 000, 000 30, 000, 000 20, 000, 000 8, 000, 000	Do.
Production year ended Mar. 31, 1957		85, 000, 000		78. 000. 000	
	May 10. 1957 June 14, 1957 July 8, 1957 Aug. 9, 1957 Sept. 10. 1957 Oct. 9, 1957 Nov. 8, 1957 Dec. 3, 1957 Dec. 31, 1957 Feb. 5, 1958 Mar. 4, 1958 Apr. 7, 1958	[1] 10. 000, 000 20. 000, 000 12. 500, 000 10. 000, 000 24. 000, 000 17. 700, 000 29, 011, 709 32. 400, 000 32. 000, 000 34. 003. 420 32. 000, 000 32, 284, 859	May 29, 1957 June 19, 1957 Oct. 25, 1957 do do do Nov. 15, 1957 Dec. 10, 1957 Jan. 16, 1958 Feb. 11, 1958 Mar. 14, 1958 Apr. 21, 1958	10. 000, 000 20. 000, 000 12. 500, 000 10. 000, 000 24. 000, 000 17. 700, 000 29. 011. 709 32. 400. 000 32. 000, 000 34. 003. 420 16. 500. 000 8. 231. 164	Conditional acceptance ratified Oct. 25, 1957.
Production year ended Mar. 31, 1958		285. 899. 988		246. 346. 293	
Production period beginning Apr. 1, 1958	May 8, 1958 June 6, 1958	17. 200. 000 18. 100. 000	May 16, 1958 June 17, 1958	17. 200. 000 18. 100. 000	

Production year ended Mar. 31, 1958		285, 899, 988		246, 346, 293	
Production period beginning Apr. 1, 1958	May 8, 1958	17, 200, 000	May 16, 1958	17, 200, 000	
	June 6, 1958	18, 100, 000	June 17, 1958	18, 100, 000	
	July 8, 1958	17, 400, 000	July 14, 1958	17, 400, 000	
	Aug. 7, 1958	18, 060, 080	Aug. 12, 1958	18, 060, 080	
	Sept. 9, 1958	18, 000, 000	Sept. 17, 1958	18, 000, 000	
	Oct. 10, 1958	11, 057, 000	Oct. 30, 1958	11, 057, 000	
		99, 817, 080		99, 817, 080	
Total Kaiser		470, 717, 068		424, 163, 373	
Reynolds Metals Co	Feb. 8, 1957	30, 000, 000	Feb. 25, 1957	30, 000, 000	Conditional acceptance ratified Sept. 16, 1957.
	Mar. 7, 1957	20, 000, 000	Mar. 22, 1957	20, 000, 000	
	Apr. 9, 1957	15, 000, 000	May 6, 1957	15, 000, 000	
Production year ended Mar. 31, 1957		65, 000, 000		65, 000, 000	
	May 9, 1957	15, 000, 000	May 31, 1957	13, 000, 000	Conditional acceptance ratified Oct. 25, 1957.
			June 12, 1957	2, 000, 000	
	June 10, 1957	12, 000, 000	Oct. 25, 1957	12, 000, 000	
	July 10, 1957	12, 000, 300	do	12, 000, 000	
	Aug. 9, 1957	5, 000, 000	do	5, 000, 000	
	Sept. 10, 1957	28, 037, 985	do	28, 037, 985	
	Sept. 30, 1957	15, 000, 000	do	15, 000, 000	
	Nov. 5, 1957	23, 000, 000	Dec. 6, 1957	23, 000, 000	
	Dec. 5, 1957	[2] 30, 000, 000	Dec. 23, 1957	30, 000, 000	
	Dec. 31, 1957	41, 000, 000	Jan. 30, 1958	41, 000, 000	
	Feb. 6, 1958	37, 500, 000	Feb. 13, 1958	37, 500, 000	
	Mar. 7, 1958	39, 000, 000	Mar. 18, 1958	39, 000, 000	
	Mar. 31, 1958	51, 500, 000	Apr. 18, 1958	51, 500, 000	
Production year ended Mar. 31, 1958		309, 037, 985		309, 037, 985	
Production period beginning Apr. 1, 1958	May 9, 1958	25, 000, 000	May 16, 1958	25, 000, 000	
	June 10, 1958	12, 513, 000	June 18, 1958	12, 513, 000	
	June 30, 1958	9, 000, 000	July 14, 1958	9, 000, 000	
	Aug. 8, 1958	9, 000, 000	Aug. 15, 1958	9, 000, 000	
	Sept. 10, 1958	9, 500, 000	Sept. 17, 1958	9, 500, 000	
	Oct. 10, 1958	7, 700, 000	Oct. 24, 1958	7, 700, 000	
		72, 713, 000		72, 713, 000	
Total, Reynolds		446, 750, 985		446, 750, 985	
Total:					
Production year ended Mar. 31, 1957		400, 000, 000		353, 000, 000	
Production year ended Mar. 31, 1958		766, 545, 973		726, 992, 278	
Production period beginning Apr. 1, 1958		195, 922, 080		195, 922, 080	
Total		1, 362, 468, 053		1, 275, 914, 358	

[1] As amended July 8, 1957.

[2] As amended Dec. 10, 1957.

Alcoa completed its contractual obligations of 2,050 million pounds in June 1958, thus terminating its tender rights with the Government. Kaiser's obligations of producing 2,282 million pounds were fulfilled in September 1958, thereby making its October 10 tenders the last available to it under four contracts. In November 1957 Reynolds completed a 200 million pounds production obligation at its Longview, Wash., plant and in May 1958 completed its contract for 1 billion pounds covering three other plants. As of October 10, 1958, there was still outstanding with Reynolds, however, a portion of the 600 million pound contract covering its plants at Arkadelphia, Ark., and Corpus Christi, Tex., which contract has a termination date of June 1959.

The highest Government expansion goal for aluminum was set by the Defense Production Administration in October 1952 at 1,746,000 tons. This figure contemplated and included the 270,000-ton contract later awarded to Harvey on September 13, 1955. At the conclusion of World War II the capacity of the industry was (in 1946) approximately 400,000 tons. By December 1956 production had reached 1,679,000 tons, according to Bureau of Mines statistics, and Department of Commerce estimates indicate that capacity had reached 2,026,500 tons on June 30, 1958. Capacity under construction at that time was 458,000 tons, bringing the total present productive capacity in being and under construction in the industry to 2,484,500 tons, a considerable part of which has taken place in the last 3 years. Another 120,000 tons capacity is being contemplated.

With respect to production in general in the United States, which has a bearing on tender rights inasmuch as those rights are predicated on the difference between production and sales and utilization, estimates show production for the year 1958 as less than in 1957. Estimated production for 1958 is 1,592,000 tons of primary aluminum. Secondary production is estimated at 377,000 tons. Actual primary and secondary production in 1957 was 1,647,710 tons and 362,000 tons, respectively.

Copper

Improvement in the domestic copper situation was becoming evident at the end of September 1958. Plus factors included a slight upturn in the demand for and production of the metal, more stabilized prices, reimposition of duty on foreign copper, and a reduction in producer inventories. Continued tenders of large amounts of copper to the Government under production-incentive contracts also contributed to the improvement.

The upturn in demand was prompting some copper producers to increase production to a small extent, while one firm was expanding production facilities. Domestic production remained considerably below the level of a year earlier, however, when excess supply depressed prices and copper was tendered to the Government for the first time.

The primary price as of September 1958 was 26½ cents per pound, the custom smelter price 26¼ cents, and the composite price 26.465 cents, off only fractions from a year earlier but still above the peril-point price of 24 cents when a 2-cent import tax would take effect over and above the duty of 1.7 cents per pound reimposed July 1, 1958, on all foreign copper.

Domestic producer stocks reached a record 253,463 tons by June 1, 1958, but 3 months later had declined to 215,560 tons, the drop being

attributed to heavy American exports to Europe rather than to any major increase in United States consumption. Stocks of copper held abroad dropped to 220,972 tons by September 1, 1958, which compares with record foreign stocks of 277,316 tons at the end of December 1957.

Maximum remaining Government exposure under 6 copper contracts outstanding as of June 30, 1958, was 273,146 tons estimated to cost $149,293,000. This compares with 400,000 tons and $238 million on September 30, 1957. Negotiations with three producers during the fiscal year 1958 enabled the General Services Administration to reduce exposures by 59,660 tons valued at $33,796,000. One contract was canceled under terms of the contract and two others were terminated by agreement.

GSA sources reported that 125,000 tons of copper were scheduled for delivery to the Government during the fiscal year 1959, with the bulk to come from two producers with escalated price contracts. These firms tendered a total of 70,654 tons to the Government during fiscal year 1958 and had maximum remaining tender rights totaling 235,553 tons. Tenders by the two companies resulted from a drop in the market price of copper below the escalated price set by Government contracts, the formula for which reduces tenders in the amount of production sold at more than the contract base price. Copper thus sold cut maximum Government exposure by 285,043 tons prior to the current fiscal year.

In the best judgment of GSA, one firm with an escalated price contract running to December 31, 1961, will terminate its contract by tendering 32,858 tons during fiscal year 1959. The other firm was expected to tender 100,302 tons during fiscal years 1959 and 1960 under a contract expiring December 31, 1960.

Government purchases under 4 other contracts, 3 of which contain no tender rights, will total 16,757 tons in the fiscal year 1959, resulting in the termination of 2 contracts and leaving 20,836 tons to be purchased under the remaining contracts.

Maximum Government exposure under all outstanding copper contracts would overrun the interim basic stockpile objective but not the maximum objective, according to GSA.

Titanium

The titanium industry represents an investment of $350 million in Government funds and private capital investment. Although commercial acceptance of the metal for special uses is promising, cost remains an important factor. Fabrication has entered the evaluation stage, and a search has continued for weldable alloys. Negligible demand for mill products has resulted in cutbacks in the production of basic titanium sponge to a fraction of capacity. The high price of mill products tends to keep production low, and price reductions are highly dependent upon volume production.

Although forecasts on the future use of titanium have been cautious, and underscored by the uncertanties of the missile age, experts see promise of higher percentage use of titanium in military applications by 1965 and a still higher percentage by 1968, but only on a per unit basis.

Near the close of the year 1958 there was not enough business to keep even one of the industry's several plants fully occupied. A second sponge-producing plant had halted operations. Cutbacks and stretchouts in military applications, which had accounted for 95 percent of the total consumption of mill products prior to the spring of 1957, continued.

Future military uses of titanium were subject to a yearlong study by the Battelle Memorial Institute for the Department of Defense. This study, which was completed in October 1958, went beyond an earlier 3-year forecast and covered the period 1961–68. It dealt with the use of titanium, or possible uses, in manned or unmanned aircraft, missiles, and powerplants, and compared titanium with such metals as special steels, aluminum, and magnesium.

The Battelle Memorial Institute found that the military still considered a price of from $2 to $3 per pound for mill shapes as necessary for widespread use of titanium. Prices, which dropped in May 1958 for the second time in less than a year, still ranged from $8 to $15 per pound and even higher for special shapes for military uses. Although titanium was costing less and special steels more, and despite the strength-weight superiority of titanium over a wide range of relatively high temperatures, cost remained the ultimate consideration, according to the study.

Battelle Memorial Institute predicted more use of titanium in the early 1960's, and that titanium would become increasingly more useful. Department of Defense sources reported the Army and Navy have ruled out titanium because of the cost factor in large quantity procurement, but that design engineers were favorable to the metal.

Commercial acceptance of titanium, while slow, was gaining in chemical industries, for in a variety of chemical and atmospheric environments titanium resists corrosion. While newly developed alloys have increased titanium range of usefulness, high strength steel alloys have proved serviceable in some special fields at one-tenth the cost.

Development of an important commercial market for titanium products is regarded as a long-range undertaking by the Bureau of Mines, which participated in several research and development breakthroughs last year. The Bureau's chief activity was a titanium casting program; its major accomplishment was the development of titanium valves which offered extremely long life under severe industrial conditions. The Bureau carried on titanium alloy research and distributed 1,000 pounds of pure titanium to private laboratories for alloy research programs sponsored by the Government. Some progress in solving a tough scrap recovery program was reported, and the Bureau of Mines had almost completed building an electrorefining cell for producing superior quality titanium from offgrade sponge and scrap. An appreciable part of the $1 million spent by the Bureau for light metals research during the last year went into the titanium program.

On the basis of a survey of commercial and military requirements, the Business and Defense Services Administration saw no increase in mill products output above 500,000 to 600,000 pounds a month for the next 2 years. This was the production level in the fourth quarter of 1958 and compared with 750,000 pounds in the fourth quarter of

1957 and peak production of 1,500,000 pounds in the first quarter of 1957. BDSA was of the opinion that the industry could survive at the 500,000 to 600,000 pounds a month level but that it would be a long time before the existing Government-financed facilities would be needed. Commercial use of titanium should pick up in 3 or 4 years, according to BDSA, which reported producers of both sponge and mill products carrying on much experimentation and continuing their efforts to develop markets for the metal.

Other developments in the titanium industry in 1958 included:

Oregon Metallurgical Co., Albany, Oreg., became the sixth major producer of mill products. Controlling interest in the firm was purchased by the Ladish Co., Cudahy, Wis., which had been forging titanium billets for jet engines.

Harvey Machine Co., Torrance, Calif., cut the price of forged billets from $7.20 to $5.40 per pound. Three other firms, Titanium Metals Corporation of America, Mallory-Sharon Metals Corp., and Crucible Steel Co. of America reduced the price to $5.30.

Mallory-Sharon purchased a titanium tetrachloride plant at Ashtabula, Ohio, from Stauffer Chemical Co., and began production of sponge for processing in its own mills, thus becoming the second integrated producer in the field. The other producer is Titanium Metals Corporation of America.

BDSA's order which provided for the scheduling of mill product deliveries was considered no longer necessary and was revoked on January 14, 1958.

The Titanium Advisory Committee, established in 1954 by the Office of Defense Mobilization to develop recommendations with regard to the Government's titanium expansion program, was abolished on June 11, 1958.

Base prices for commercially pure (unalloyed) mill products declined on May 9, 1958, for the seventh time since February 1954. Prices listed below are subject to extra charges for special sizes, gages, finishes, and quantities:

Titanium mill products

[Price per pound]

	May 9, 1958	June 4, 1957	February 1954
Sheet	$9.10	$10.10	$16.50
Plate	6.00	8.00	12.75
Strip	8.50	9.50	16.50
Wire	8.50	9.50	13.00
Forging billets	4.10	6.00	7.75
Hot-rolled forged bars	5.60	6.50	8.50

Cramet, Inc., terminated its Government contract on March 7, 1958, and ownership of its sponge plant at Chattanooga, Tenn., was assumed by the General Services Administration in settlement of the remainder of a $25 million Government advance. Cramet exercised an option to terminate due to the lack of market demand for sponge.

Production was halted in mid-April, and the General Services Administration offered the plant, with 6,000-ton annual capacity, for sale or lease. The facility was not placed in the industrial reserve, and ODM authorized its sale for any use. The plant remained a Government property late in 1958.

The settlement between the General Services Administration and Cramet resulted in the Government receiving title to the plant and raw-materials inventories and agreeing to assume the contractor's obligations, which included 4 contracts requiring the purchase of 24,100 tons of rutile as of December 31, 1957. The contract price of the ore was $190 a ton for all but 441 tons, and the price for this amount was $200 per ton. The market price was $95 to $100 in late 1958. Figures on the rutile being acquired in the settlement are $4,603,000 as the cost of the ore and $2,603,000 as the probable loss to be incurred on such deliveries. Under the Cramet contract, the Government was required to purchase a total of 6,000 tons of sponge. Under terms of the settlement, however, the Government avoided the obligation of purchasing 490 tons, and acquired the last 893 tons at the production cost price of $2.45 a pound instead of the escalated contract price of $4.43.

The General Services Administration estimated that, by this settlement with Cramet, Government expenditures under the contract will amount to $7,692,000, including termination expenses. This compares with $15,313,000 had the contract proceeded almost to its end, the plant been turned over in settlement, and termination expenses then incurred at that time.

Because of depressed conditions in the sponge industry, Electro Metallurgical Co. was permitted to stretch out contract deliveries to the Government through December 1958 although the Government on February 4, 1957, had exercised its option to terminate the contract 12 months later. By curtailing operations slowly at its 7,500-ton plant at Ashtabula, Ohio, Electromet was hopeful of staying in business until the sponge market picked up. The stretchout entailed no additional cost to the Government. Through June 30, 1958, the Government purchased 8,125 tons of sponge from Electromet, and General Services Administration estimated an additional 317 tons would be tendered, a total of 8,442 tons.

The General Services Administration reported that Titanium Metals Corporation of America had liquidated in full the $15 million Government advance for the installation of sponge facilities at Henderson, Nev. The $5.5 million balance due on June 30, 1957, was repaid in sponge produced at the 3,600-ton plant, and no further metal will be tendered.

There were no prospects that the 1,800-ton Dow Chemical Co. plant at Midland, Mich., would resume production of sponge. The plant was shut down in the summer of 1957 after 978 tons were put to the Government. However, under terms of the Government contract, the facility must be kept on a standby basis through 1961.

Sponge production was up but volume still very low at the Newport, Del., plant of E. I. du Pont de Nemours & Co., Inc., in the closing months of 1958. This firm also had repaid in full its Government advance with deliveries of sponge produced at the 2,700-ton plant.

Domestic production of titanium sponge continued its downward trend in 1958 despite increases in sponge and ingot consumption. The result was a reduction of industry stock of sponge from 2,800 tons at the beginning of 1958 to 1,300 tons on June 30.

Total United States sponge production for the first 6 months of 1958 was 2,136 tons as compared with 17,249 tons for the entire year of 1957. Delivery of 2,284 tons to the DPA inventory during the first 6 months of 1958 raised the total DPA inventory to 22,105 tons. During the calendar year 1957, there were 10,505 tons delivered to the inventory. Domestic consumption of sponge for the first 6 months of 1958 amounted to 1,449 tons. As of June 30, 1958, the CCC inventory (supplemental stockpile) of sponge was 3,346 tons, with 5,675 tons remaining to be delivered.

Imports of Japanese sponge for the year ending June 30, 1958, totaled 298 tons. The bulk of the Japanese metal came into the United States under barter agreements and went into the supplemental stockpile. Most of the remainder was imported by Crucible Steel, Harvey Machine, and Republic Steel. The latter firm was working down a large inventory of Japanese sponge and getting still more under contracts executed when domestic sponge was in short supply.

Domestic sponge prices dropped twice in 1958 to $1.82 a pound for grade A–1 and $1.70 for grade A–2 on October 1. Until then, the prices of Japanese producers had been 4 to 10 percent less than domestic prices. The 10-year spread in sponge prices is shown in the table below:

Titanium sponge

[Price per pound]

Date of change	Grade A–1	Grade A–2
Initial price, 1948	$5.00	
Apr. 1, 1954	4.72	$4.46
Dec. 1, 1954	4.50	4.00
Apr. 1, 1955	3.95	3.50
Nov. 1, 1955	3.75	3.25
Nov. 23, 1955	3.45	3.15
May 15, 1956	3.25	2.95
July 2, 1956	3.00	2.70
Dec. 5, 1956	2.75	2.50
June 4, 1957	2.25	2.00
Apr. 1, 1958	2.05	1.85
Oct. 1, 1958	1.82	1.70

The following table shows the status of the five Government titanium sponge expansion contracts as of June 30, 1958:

Titanium sponge expansion contracts

	Totals	GS-OOP(D)-12047 Titanium Metals Corp. of America	DMP-6 E. I. duPont de Nemours & Co., Inc.	DMP-75 Cramet, Inc.[1]	DMP-99 the Dow Chemical Co.	DMP-100 Electro Metallurgical Co.
	In short tons					
Annual capacity	[2] 21,600	3,600	2,700	6,000	1,800	7,500
Total tonnage to be produced under contract	100,000	18,000	13,500	30,000	1,000	37,500
Maximum "put" to Government	44,500	[3] 0	[4] 0	6,000	1,000	[5] 37,500
Remaining exposure, June 30, 1958	317	[3] 0	0	0	0	317
Deliveries to Government in partial payment of advances and interest	1,988	1,809	179	0	0	0
Production to June 30, 1958, under contracts	42,200					
Total deliveries to Government, June 30, 1958	16,601	1,809	179	5,510	978	8,125
	Dollars					
Cost of facilities	87,322,503	14,874,194	10,340,000	28,594,849	[6] 4,500,000	29,013,460
Government advances including capitalized interest	51,717,984	14,874,194	10,340,000	26,503,790	0	0
Remainder due Government on advances, June 30, 1958	0	0	0	0	0	0
Can facility be given Government in settlement of advance?		No	No	[7] (6,260,000)	No	[8] No
Government obligation under termination	20,000,000	0	0	([9])	0	[9] 20,000,000
Maximum cost to Government if contract is terminated	20,000,000	0	0	([9])	0	[10] 20,000,000
Offsets to such cost		0	0	([9])	0	0
Value of repayment of advance and interest in titanium	12,471,804	10,953,000	1,518,804	0	0	0
Cost to Government of all deliveries	119,152,804	10,953,000	1,518,804	51,860,000	9,596,000	45,225,000
Cost to Government of titanium to be delivered	1,445,000	[3] 0	0	0	0	1,445,000
Gross transactions contracted	147,435,000	10,953,000	10,580,000	51,313,000	9,596,000	64,993,000
Completed transactions	121,400,000	10,953,000	10,580,000	46,710,000	9,596,000	43,561,000
Incompleted transactions	26,035,000	0	0	4,603,000	0	21,432,000
Probable ultimate net cost	81,818,000	1,635,000	(50,000)	46,378,000	5,768,000	28,087,000
Losses realized	(6,760,000)	(2,228,000)	(806,000)	(3,877,000)	20,000	131,000
Estimated losses:						
On inventory on hand	65,769,000	3,863,000	756,000	47,652,000	5,748,000	7,750,000
On future deliveries	22,809,000	0	0	2,603,000	0	20,206,000

[1] Resulting from a settlement with Cramet, the Government received title to the

[4] No "put" rights, as such. Contractor, however, could repay advance in titanium at market price at date of delivery. Advance has been repaid in full, so that no further

[1] Resulting from a settlement with Cramet, the Government received title to the plant and raw materials inventories and agreed to assume the contractor's obligations under certain rutile supply and other contracts with remaining tonnages of approximately 24,100 short tons. The Government avoided, however, the obligation of purchasing 490 short tons which reduced total purchases from 6,000 to 5,510, and acquired the last 893 tons, which were produced in early 1958 or were on hand at the close of 1957 at cost in lieu of the contract price, a substantial saving. It is estimated that by this settlement the Government's expenditures under the contract, including termination expenses, will amount to $7,692,000 as opposed to $15,313,000 had the contract proceeded almost to its end, the plant been turned over in settlement, and termination expenses been incurred at that time.

While of necessity the tabulation submitted herewith shows zero for this contract under "Cost to Government of titanium to be delivered" it should be noted that the probable ultimate net cost figures give effect to the probable loss on the rutile being acquired in the Cramet settlement. The figures are $4,603,000 as the cost of the rutile with $2,603,000 as the probable loss to be incurred on such deliveries.

[2] With Du Pont's precontract capacity of 900 tons, the total is 22,500, the goal established by ODM.

[3] No "put" rights as such. Contractor, however, could repay advance in titanium at market price at date of delivery. Since the last report the advance has been repaid in full so that no further metal will be tendered.

[4] No "put" rights, as such. Contractor, however, could repay advance in titanium at market price at date of delivery. Advance has been repaid in full, so that no further metal will be tendered.

[5] Contract provides that the Government can terminate its obligation to take metal upon 1 year's notice, and thereafter pay to contractor each of the remaining operating years (contract is for 5 operating years) that year's part (⅕) of 92½ percent of plant cost not recovered through production and sale of metal. Notice was given, so that the Government's purchase obligation would have terminated as of Feb. 4, 1958. By agreement, however, and without increasing the total tonnage to be received by such time extension the Government has extended the time under which the metal can be "put" to it through calendar year 1958. Through June 30, 1958, the Government has purchased 8,125 tons, and estimates an additional 317 tons will be tendered, a total of 8,442.

[6] Estimate. Does not include Dow's preexisting facilities.

[7] Done in effect.

[8] Settled.

[9] This is the unamortized portion of 92½ percent of the plant cost as of Dec. 31, 1958.

[10] This will be reduced proportionately by every pound of titanium produced and sold to industry or to Government (Government can call) during remaining life of contract, approximately 4 years. Capacity production would reduce this to zero. ___

Summaries

Total certified gross transactions		$228, 808, 0
Gross transactions contracted as of June 30, 1958		226, 376, 0
Total certified probable ultimate net cost		132, 467, 0
Probable ultimate net cost of transactions contracted as of June 6, 1958		112, 729, 0
Inventory as of June 30, 1958 (22,105 short tons)		156, 652, 6
Average cost of inventory:		
Per short ton	$7, 086. 75	
Per pound	3. 543	
Present market value of inventory [1]		86, 418, 5
Inventory loss, should complete liquidation occur at market prices as of June 30, 1958		70, 234, 1

[1] Based on 13,325 short tons grade A–1, at $2.05 per pound, 7,780 short tons grade A–2 at $1.85 per pound, 1,000 short tons grade A–3, at $1.50 per pound. Average, $1.954 per pound.

[Short tons]

	1957	1958 (6 months)
Total United States titanium sponge production	17, 249	2, 13
Delivered to DPA inventory	10, 505	2, 28
Total DPA inventory (at end of period)	19, 821	22, 10

As of June 30, 1958, titanium sponge in CCC inventory was 3,346 tons. Remaining CCC sponge to be delivered 5,675 tons.

Problem Materials

The list of stockpile items in short supply narrowed further in the year ended June 30, 1958, with the General Services Administration, under policy directives issued by the Office of Defense Mobilization, limiting procurement to materials needed to meet priority levels and to those needed to maintain our mobilization base. Buying of other materials was suspended or halted completely during the year. Items and their status follow:

ASBESTOS, AMOSITE

Procurement is continuing because of scarcity of supply. The single producer, a British corporation in Rhodesia, will neither expand production nor enter into long-term contracts with our Government. There is no known substitute for our military application of this long-fiber asbestos.

DIAMOND DIES, SMALL

The first directive for procurement of this item was issued in fiscal 1958 but actual procurement was not authorized until September 3, 1958, after the Office of Civil and Defense Mobilization (successor to ODM) had resolved questions as to stockpile specifications and as to whether a mobilization base requirement, supported by domestic purchases, was needed. Fifty percent of the dies purchased in fiscal 1959 will be mounted and of domestic origin. The remainder will be unmounted dies which may be of foreign origin.

MICA, MUSCOVITE BLOCK, AND FILM

These items continued in short supply and the Government took all it could get for the stockpile in fiscal 1958. The major suppliers in India and Brazil may increase production during fiscal 1959 on

the strength of 5-year Defense Production Act inventory contracts subject to cancellation after 2 years. The Government also is buying on a spot-offering basis for the stockpile.

JEWEL BEARINGS

Stockpile purchases during fiscal 1958 were confined to the Rolla, N. Dak., plant operated for the Army by the Bulova Corp., which is seeking to produce bearings competitive in the commercial market with the Swiss product. OCDM directed GSA to take Bulova production only as a residual buyer during fiscal 1959. Our military was directed to place all bearing orders with Bulova. The remaining 1959 output of the Rolla plant, which Bulova is unable to market commercially, will be purchased by GSA to the maximum extent of $700,000, which compares with fiscal 1958 stockpile purchases.

CHROMIUM METAL, ELECTROLYTIC

This was a special requirement item purchased during 1958 to maintain our mobilization base. No supply or price problem exists. No procurement of this metal was budgeted for fiscal 1959.

FLUORSPAR, METALLURGICAL

Stockpile acquisition of this item was virtually completed at the close of fiscal 1958. The available supply is plentiful. Government purchases, limited to domestic production, were for the purpose of maintaining the mobilization base. There were no 1959 purchase commitments.

MANGANESE, BATTERY GRADE, SYNTHETIC DIOXIDE

This was another mobilization base item. Purchases were halted during fiscal 1958 and GSA had no procurement plans for the future.

SELENIUM

This comparatively new stockpile item is no longer a problem and the objective may go down further because silicon, in limitless supply, is as good or better as a substitute. Purchasing was halted in fiscal 1958 and no funds were budgeted for 1959 purchases.

LEAD

Buying for the stockpile ended in June 1958. Purchases during the fiscal year were only to maintain the mobilization base.

ZINC

Stockpile purchases were halted in March 1958, on this mobilization base item.

Minerals Exploration

For over 7 years, April 1951 through June 30, 1958, a program for the encouragement of domestic exploration for deposits of strategic

and critical minerals has been conducted by the Defense Minerals Exploration Administration, Department of the Interior, under section 303 of the Defense Production Act, as amended. A total of $38.8 million of DPA borrowing authority funds has been certified by ODM to finance this program during this time.

Under the program DMEA entered into contracts with private parties for the exploration of indicated or undeveloped sources of strategic and critical metals or minerals within established areas. Each contract set forth the specific work to be performed with the total expenditures limited on the basis of estimated costs. The Government's participation has ranged from 50 percent to 90 percent of the allowable cost of a project, depending upon the mineral being sought and the available domestic supply. Since March 1954 the Government's contribution has been limited to a maximum of 75 percent of the allowable costs. The higher rates of participation were established due to the belief that there was a need for a vigorous search for new sources of ore reserves to provide sufficient quantities to meet the defense requirements in the event of an emergency, without relying too heavily on foreign sources.

Regulations establishing the criteria and operating procedures for determining the eligibility of the applications filed by contractors for Government aid are set forth in DMEA Order 1 Revised. Through June 30, 1958, DMEA received 3,888 applications for exploration assistance on projects located in 43 States and Alaska. Of the total applications 1,159 involving exploration for 30 different minerals met the eligibility criteria established by DMEA for entering into Government contracts on a participating basis. The exploration and development work approved under these contracts was valued at an estimated $56.8 million, with maximum Government participation of $34.8 million, but only $21,287,375 of Government funds had been actually spent as of June 30, 1958. Of the 1,159 contracts, 989 had been completed, canceled or terminated by mutual agreement, leaving a total of 170 in force on June 30, 1958. Sixty-six of the 989 contracts were canceled without any authorized work being performed. The total estimated project cost of all the contracts, the Government's participation and actual cost to the Government, as of June 30, 1958, are as follows:

	Number of contracts	Total contract value	Government participation	Government's participation spent
Total projects:				
Total contracts executed	1,159	$56,798,111	$34,821,069	
Canceled without work performed	73	1,975,460	1,227,610	
Completed or terminated	916	36,704,373	23,155,367	$16,197,75
Contracts in force	170	18,118,278	10,438,092	5,089,62
Government's participation actually spent				21,287,37
Projects certified for substantial ore discoveries:				
Completed, canceled or terminated	321	19,275,231	12,264,890	9,979,02
Remaining in force	16	2,536,390	1,425,338	1,060,35

From the beginning of the program through June 30, 1958, DMEA certified 337 projects as discoveries or developments of significant quantities of ores. Two of these contracts were canceled without any

Government expense. Another 23 projects were under consideration for certification pending further evaluation as to their ore showings. Of the 337 certified projects, 243 paid royalties to the Government in the amount of $2.2 million, and 34 repaid in full the Government's contribution of $666,975. Royalties amounting to $336,634 have been paid to the Government on 107 uncertified projects, and $13,046 has been paid on 18 other projects under special royalty agreements. Total royalties paid to June 30 amounted to approximately $2.5 million and the net value of the minerals produced from the royalty paying projects was about $51 million. The potential ore reserves on the 337 certified projects are estimated at a net recoverable value in excess of $470 million at current market prices.

In April 1951, when the initial exploration program was undertaken, the list included 32 minerals which were eligible for Government financial aid. Within a year's time the list was expanded to 37 items. When the shortages eased for many of the critical defense minerals as a result of the cessation of the Korean war, the Director of ODM, in May 1953, restricted the number of minerals eligible for Government participation in the exploration program to a total of 19. This number was further reduced to 14 items by ODM in November 1953. Such actions by the Director of ODM were in keeping with the apparent intent of Congress that incentive programs under the Defense Production Act should be geared to defense needs.

In late 1953 and early 1954 depressed market conditions in certain of the mineral and metal industries were such that producers were requesting help from the Government. In October 1953 the President appointed the Cabinet Committee on Minerals Policy to study and make recommendations on national policies affecting the production and utilization of minerals and metals.

As the market conditions for minerals worsened, ODM, on February 9, 1954, reversed its policy of restricting the DMEA program and reinstated 19 of the minerals and metals that had previously been removed from the list, again bringing the list of items eligible for Government aid to a total of 33 minerals. In taking this action, the Director of ODM stated that it was recognized that there existed a very imperfect knowledge of the United States reserves of strategic and critical metals and minerals, that our stockpile objectives assume some imports in wartime from strategically accessible sources as well as domestic production, and that the maintenance of an adequate mobilization base (including continued exploration activities) is threatened by depressed conditions in some elements of the domestic mining industry.

On August 22, 1957, the chairman of your committee, in writing to the Director of the Office of Defense Mobilization, stated that it was his understanding that there had been no deletions from the list and only one addition to the list of minerals and metals eligible for exploration since 1954. Your chairman also stated that the Defense Production Act relates to exploration for defense purposes, and he suggested that the Office of Defense Mobilization make a review of the exploration program to determine whether there should be deletions from the list or additions to the list of the 34 materials for which Defense Production Act funds were available, with due regard to the percentage of cost which should be borne by the Government for defense purposes.

In his reply to the chairman on September 11, 1957, the Acting Director of ODM stated that, following a review of DMEA's exploration program, it had been decided not to delete any of the 34 materials on the eligibility list at that time. The major reason given was that minerals exploration was included in the long-range minerals program which the Department of the Interior had outlined to the Congress and that the current DMEA program would form the nucleus of the exploration phase of any long-range program undertaken. The letter did advise that ODM had recommended to the Secretary of the Interior that the Government's participation should be reduced from 75 to 50 percent for minerals for which the long-term objective had been reached and no major supply problem was involved. On October 22, 1957, DMEA revised DMEA Order 1 making the Government's share 50 percent instead of 75 percent of the eligible cost of the project on 14 minerals.

In a letter dated August 29, 1957, to the Secretary of the Interior certifying an additional $4,800,000 of borrowing authority funds to finance exploration assistance during the fiscal year 1958, the Director of ODM pointed out that, since all expansion goals for minerals and metals had been closed and the stockpile objectives for most materials had been reached, the minerals exploration program should be financed by direct appropriations beginning with the fiscal year 1959 rather than continuing the use of DPA funds.

On June 6, 1958, the Administrator of DMEA issued a notification of the termination of DMEA programs for providing Government aid in financing the cost of projects for exploration of new or undeveloped sources of strategic or critical metals and minerals, effective June 30, 1958. The notice stated also that exploration project contracts in effect on that date would remain in force until terminated in accordance with the contract provisions.

In writing the Director of ODM on June 25, 1958, the Secretary of the Interior advised that legislation had been introduced in the Congress to continue a DMEA-type program on a permanent basis, using appropriated funds, but that DPA funds would be required through the fiscal year 1959 for the orderly liquidation of the DMEA program. These needs include funds sufficient to finance administrative expense, interest on notes issued to the Treasury, and amendments to contracts in force to protect the Government's investment. It was indicated that such amendments might be necessary to determine if a certification of discovery or development could be issued and a lien established against future production. To carry out these objectives, it was estimated in the June 25 letter that additional borrowing authorization in the amount of $750,000 would be required for the fiscal year 1959. In a subsequent review of the available funds, DMEA decided that sufficient funds were available to cover the obligations expected to be incurred during the fiscal year 1959 without need of any additional authorization. The following statement indicates the status of the Defense Production Act funds authorized for DMEA as of June 30, 1958, together with an estimate of obligations to be incurred during the fiscal year 1959:

Total funds authorized by ODM	$38,800,000
Expenditures:	
Contract obligations and reservations	26,562,453
Administrative expenses	8,196,307
Interest to Treasury	2,380,841
Total	37,139,601
Balance of DPA authorized funds as of June 30, 1958	1,660,399
Estimated expenses to be incurred during fiscal 1959:	
To finance projects to completion for definitive results	250,000
Administrative, to complete approximately 170 contracts, inspect 335 certified projects twice yearly, and collect royalties; process necessary amendments to contracts in force and make final reports	395,000
Interest to Treasury	850,000
Total funds required	1,495,000
Estimated balance of DPA authorized funds as of June 30, 1959	165,399

In view of the long-term contractual agreements, some of which could remain in force for a period of 5 to 10 years, DMEA estimates that a cost of about $8 million will be incurred in closing out the DPA-financed exploration projects over the next 5 years. On the basis of this estimate, approximately $6.4 million, in addition to the $38.8 million already authorized, would have to be made available from the DPA borrowing authority or direct appropriations for this purpose. As indicated above, the projected operating costs include such items as administrative expenses, amendments to existing contracts, collection of royalties, inspections of certified projects, and interest to the Treasury on outstanding borrowings. It will be noted that the estimated interest charges for the next 5-year period make up $6.8 million, or 85 percent of the total $8 million in estimated expenditures. A breakdown of these estimated expenditures follows:

Fiscal year	Necessary contract amendments	Administrative expenses	Interest to Treasury	Total
1959	$250,000	$395,000	$850,000	$1,495,000
1960	100,000	170,000	1,237,000	1,507,000
1961	50,000	120,000	1,415,000	1,585,000
1962		80,000	1,569,000	1,649,000
1963		50,000	1,747,000	1,797,000
5-year total	400,000	815,000	6,818,000	8,033,000

PRESENT STATUS OF MINERALS EXPLORATION

Public Law 85–701, approved August 22, 1958, established a program to provide for the discovery of additional domestic mineral reserves. This exploration program is to be financed from appropriations rather than allocation of funds under the Defense Production Act.

The law declares it to be the policy of Congress to stimulate exploration for minerals within the United States, its Territories, and possessions. The Secretary of the Interior is authorized and directed to

establish and maintain a program for exploration of minerals by private industry, excluding organic fuels, "in order to provide for discovery of additional domestic mineral reserves." Authority is given the Secretary to enter into exploration contracts to provide such Federal financial participation as he deems to be in the national interest. Provision shall be made for repayment to the United States from royalties on the value of production from the areas described in the contracts together with interest on the Federal funds made available. Interest is to be calculated from the time of certification of the contracts. The rate of interest is to be not less than that which the Department of the Interior would have to pay on borrowed funds from the Treasury on obligations of a comparable maturity date, plus ½ percent per annum in lieu of recovering the cost of administering the contracts.

The Secretary of the Interior may certify a contract if in his opinion the results of the exploration project disclose that mineral production may be possible in the contract area, and thenceforth royalty payments are a charge against production for the full period of the contract but not to exceed 25 years. However, whenever he deems it necessary in the public interest he may enter into royalty agreements to provide for payments in the same manner as though the project had been certified, but production cannot be required under the act. Contracts may be adjusted and modified from time to time. A maximum of $250,000 is placed on Government participation in any single contract.

The act provides that an applicant must furnish evidence that funds from commercial sources are unavailable on reasonable terms before Government funds are made available. Departments and agencies of the Government are authorized to advise and assist the Secretary of the Interior in carrying out the minerals exploration program upon his request and may expend their funds with or without reimbursement for such purposes. Appropriations to carry out the provisions of the act are authorized by the act.

The supplemental appropriation bill for 1959, passed in the closing days of the 85th Congress, carried in its final form an appropriation of $4 million for the new Office of Minerals Exploration, Department of the Interior. This was $700,000 less than proposed in the Senate version of the bill. Conference Report No. 2677, dated August 19, 1958, which accompanied the supplemental appropriation bill contained language on the expenditure of funds as follows:

> Office of Minerals Exploration amendment No. 42: Reported in disagreement. The managers on the part of the House intend to offer a motion to appropriate $4 million for salaries and expenses. The conferees are in agreement that participation by the Federal Government in exploration project contracts should not exceed 50 percent of the actual project cost. In addition, emphasis should be placed on providing exploration assistance on those strategic and critical minerals and metals for which there is a serious shortage in the United States. Not to exceed $900,000 of the amount provided shall be available for administration and technical services. In addition, not to exceed $200,000 shall be available from the borrowing authority funds of the Office of Defense Mobilization for administering liquidation of contracts in force.

With respect to the $200,000 limitation on the use of borrowing authority funds, the Defense Minerals Exploration Administration states in the appendix of this report that this pertains only to costs of administration, and DMEA further states that it does not apply to the use of borrowing authority funds for interest on notes issued to the Treasury and such amendments of DMEA contracts in force as might be necessary to obtain definitive results or otherwise to reach the target of the projects.

Funds from the supplemental appropriations bill were available about September 1, 1958. The conference report which accompanied the supplemental appropriations bill expressed the desire that Federal participation in exploration contracts be limited to 50 percent of actual project cost, whereas the act itself leaves this matter to the discretion of the Secretary of the Interior. While the act is broad in its terminology as relating to the discovery of additional domestic mineral reserves, the appropriations conferees indicated a desire that emphasis be placed on strategic and critical minerals in short supply in the United States.

Executive Reserve

The executive reserve program was established under the authority of the Defense Production Act Amendments of 1955, and provides for the selection and training of civilians to serve the Government in key positions during a national emergency. It contributes to the capabilities of departments and agencies having mobilization responsibilities. Under Executive Order 10660, issued on February 15, 1956, the President directed the Director of the Office of Defense Mobilization (now OCDM)—

> to institute and administer the executive reserve program; to coordinate the activities of other agencies in establishing units of the reserve; to provide for appropriate standards of recruitment and training; and to issue necessary rules and regulations in connection with the program.

The program places heavy emphasis on postattack defense posture by enrolling executives from all segments of the economy who have broad experience in production, manpower, transportation, communications, and other critical fields. The program supplants improvised mobilization methods of the past, generally regarded as totally inadequate in the age of nuclear weapons.

Reservists designated to the Civil Service Commission for Government executive positions are expected to number approximately 2,200 by the end of the calendar year 1958. This number exceeds the original goal of 2,000 reservists and approaches a tentative goal of 2,500 considered necessary to staff national mobilization headquarters and the 8 regional headquarters in an emergency.

ODCM (now OCDM) reported 1,227 reservists enrolled at the beginning of the fiscal year 1959 as compared with 836 only 9 months earlier. An additional 981 contracts were scheduled for negotiation by December 31, 1958. OCDM indicated that a further buildup of the executive reserve at a rapid rate would be possible under mobilization conditions.

Fourteen Federal departments and agencies now have authorized executive reserve units, including those added during the fiscal year

1958 by the Housing and Home Finance Agency, the Federal Communications Commission, the General Services Administration, and a classified agency.

A high percentage of reservists have been drawn from a half dozen of the more populous States and the District of Columbia. Eight States had no reservists at the close of the fiscal year 1958 and the remaining States had comparatively few. This situation may be improved by selective recruiting of reservists in areas where there are shortages and by transferring some now assigned to national headquarters or other regional headquarters. OCDM also contemplates strengthening of the Executive Reserve at the field level.

More than half of the reservists enrolled at the start of the fiscal year 1959 were recruited from industries with more than 500 employees. Smaller industries supplied about one-third of the total. Others were recruited from colleges and universities, trade and professional associations, labor organizations, cities, States, and the Federal Government. A number were self-employed or retired from active employment.

Defense industry's biggest role in the program centers in the executive reserve unit of the Business and Defense Services Administration which had 750 of the 850 Department of Commerce reservists as of September 30, 1958. The BDSA unit, expected to grow to 1,500 and become the largest reserve group by far, would provide the core of an emergency production agency. There is now no comparable agency in the Government.

BDSA's mobilization responsibilities are to administer priorities and allocations of materials and production in support of military and atomic-energy programs, to participate in the Government's overall industrial preparedness programs under the general direction of OCDM, and to develop and promote measures for the expansion of productive capacity, and for production, distribution, and supply of materials and facilities necessary for defense and maintaining a strong national economy.

BDSA lists executive reservists in 27 functional areas and would expand to perhaps 50 areas under emergency conditions. Participation ranged from a single reservist in the industrial mobilization field to 92 reservists in the iron and steel area as of July 11, 1958.

Under postattack conditions, a BDSA reservist might serve initially at his regional location. Plans are being developed for the decentralized operation of an emergency production agency in the event of nuclear attack. After communications and transportation had been reestablished, many reservists would be called to staff the national headquarters. Recruitment in 1958 emphasized geographic dispersal in the identification and selection of prospective candidates for the executive reserve.

As part of BDSA's participation in Operation Alert, 1958, more than 500 business and industrial leaders were briefed on current mobilization policies and problems in a nationwide series of conferences held in mid-July in 13 cities.

These 1-day meetings, first of the kind for the BDSA executive reserve, included discussion of the possible effect of nuclear-bomb damage on basic industries and the problem of continuing or resuming production after an attack. Special attention was given to data

developed during Operation Alert concerning available inventories of items essential to national survival. The reservists, attending the conferences on a voluntary basis and paying their own expenses, were briefed by experts from BDSA's Washington headquarters. Participation was very enthusiastic, BDSA officials reported. In November 1957, 1,200 reservists, employers of reservists, and Government personnel attended a national conference in Washington and were addressed by the President, Vice President, and other high-ranking officials.

The second largest executive reserve unit is that of the Office of Civil and Defense Mobilization, where the pilot reserve of 50 executives organized in 1955 had more than doubled in 3 years. Although other units generally recruit their own reservists, OCDM screens many volunteer executives for designation to the departments and agencies with mobilization functions.

The Interstate Commerce Commission, with delegations in the vital field of emergency transportation, had 45 reservists enrolled at the start of the fiscal year 1959, and will expand its reserve unit to 100 civilian experts. The Department of Defense unit, including executives designated by the Army and Navy, will be expanded fivefold to 125. Additional experts will be recruited for established units in the United States Information Agency, the Departments of State, Justice, Interior, and Labor, the Small Business Administration, the Housing and Home Finance Agency, the Federal Communications Commission, and the General Services Administration.

Executive reserve training, with each unit responsible for its own educational program, includes orientation sessions, continuous and up-to-date information on mobilization planning and programs, and other activities to keep the reservist fully abreast of developments in his field which affect the capacity of the United States to mobilize its resources in an emergency. It may also include participation in relocation exercises.

Executive Order No. 10660, dated February 15, 1956, in accordance with the Defense Production Act Amendments of 1955, directed the Director of the Office of Defense Mobilization to institute and administer the national-defense executive reserve program and to coordinate the activities of other agencies of the Government is establishing units of the reserve. On February 23, 1956, ODM, by Defense Mobilization Order I–21, established the executive reserve by authorizing departments and agencies having major mobilization responsibilities to establish units of the executive reserve. Authority over the executive reserve is now vested in the Office of Civil and Defense Moblization, created by the merger of ODM and the Federal Civil Defense Administration under Reorganization Plan No. 1 of 1958. The Civil Service Commission maintains a central register of prospective and designated reservists, and serves as the central clearing point for the executive reserve program.

Committee Publications

The complete list of your committee's printed reports is as follows:

***Hoarding and Strategic Materials: Hearing before the Joint Committee on Defense Production, December 20, 1950.**

Regulation W—Automotive: Hearing on the effect of regulation W on automotive sales and financing, December 6, 7, 8, and 11, 1950.

Progress Report No. 1: Discussion of Defense Production Act, Eric Johnston and Michael DiSalle, February 9, 1951.
Progress Report No. 2: To hear Charles E. Wilson, Director of Defense Mobilization, February 8, 1951.
Progress Report No. 3: Wage Stabilization Board and Defense Production Administration, February 13, 1951.
*Progress Report No. 4: To hear Michael V. DiSalle, Director, Office of Price Stabilization, March 2, 1951.
Progress Report No. 5: Secretary Charles F. Brannan and Michael V. DiSalle on cotton controls, March 8, 1951.
Progress Report No. 6: Manly Fleischmann, Administrator, NPA, on tax amortization program, March 19, 1951.
*Progress Report No. 7: Charles E. Wilson, Director, Office of Defense Mobilization, on his April 1 report to the President; opinion on Government contracts by Robert L'Heureux, April 4, 1951.
Progress Report No. 8: William H. Harrison, Administrator, Defense Production Administration, tax amortization and certificates of necessity, April 12, 1951.
*Progress Report No. 9: Witnesses on the meat production and supply situation, June 13, 15, 1951.
Progress Report No. 10: Charles E. Wilson, Director, Office of Defense Mobilization; Manly Fleischmann, Administrator, Defense Production Administration; and Michael V. DiSalle, Director, Office of Price Stabilization, price regulations, allocations, and priorities, November 26 and 27, 1951.
*Progress Report No. 11 (S. Rept. No. 1061): Steel, copper, and aluminum allocations survey, January 15, 1952.
Progress Report No. 12: Gordon Dean, Chairman, and others from the Atomic Energy Commission, discussion of Savannah River project, November 27, 1951.
Progress Report No. 13 (S. Rept. No. 1107): Machine tools, January 23, 1952.
Progress Report No. 14 (S. Rept. No. 1310): World supply, United States production, consumption, imports, and exports of steel, copper, and aluminum, and domestic requirements and allocations, March 17, 1952.
*Progress Report No. 15 (S. Rept. No. 1062): Electric power study, January 15, 1952.
*Progress Report No. 16: Charles E. Wilson, Director, Office of Defense Mobilization, and Manly Fleischmann, Administrator, Defense Production Administration, on second quarter 1952 allocations, January 9, 1952.
Progress Report No. 17: Charles Sawyer, Secretary of Commerce; Thomas H. MacDonald, Commissioner, Bureau of Public Roads; and Vice Adm. Edward Cochrane, Administrator, Maritime Commission, on second quarter 1952 allocations, January 15, 1952.
Progress Report No. 18: Arthur S. Flemming, Assistant to the Director—Manpower, and Rodolfo A. Correa, General Counsel, Office of Defense Mobilization, on procurement in labor-surplus areas, February 6, 1952.
Progress Report No. 19: Various witnesses on the Canadian aluminum proposals, May 26 and June 2, 1952.
Progres Report No. 20 (S. Rept. No. 1987): Aluminum program, June 30, 1952.
Progress Report No. 21: Henry H. Fowler, Director, Office of Defense Mobilization, on current and future defense activities, October 1, 1952.
Progress Report No. 22 (S. Rept. No. 2): A study of consumer commodity prices and margin spreads, October 22, 1952.
Progress Report No. 23: Hearing on price control and OPS activities, November 19, 1952.
Progress Report No. 24 (H. Rept. No. 1): Aluminum expansion program and competition, January 2, 1953.
Progress Report No. 25 (S. Rept. No. 154): Review of tax amortization program, April 20, 1953.
Progress Report No. 26: Hearing, ODM, Munitions Board, and GSA on Defense Manpower Policy No. 4, May 4, 1953.
Progress Report No. 27: Witnesses from Government agencies on proportion of Government contracts awarded to small-business concerns, March 8, 1954.
Progress Report No. 28: Witnesses in the matter of loans to the United States Tin Corp. under the Defense Production Act, July 7, 8, 9, 12, 13, 14, 20, 21, 23, 26, 28, and 29, 1954.
Progress Report No. 29 (H. Rept. No. 2): United States Tin Corp. loans.

*Supply exhausted; no longer available.

Progress Report No. 30: Dr. Arthur S. Flemming, Director, Office of Defense Mobilization, on progress of defense mobilization program, April 15, 1955.
Progress Report No. 31: To hear witnesses on the activities of the Interior Department under the Defense Production Act, June 9, 1955.
Progress Report No. 32: To hear witnesses on Defense Production Act contracts entered into by the Defense Materials Procurement Agency, July 6, 14, 27, 1955.
Progress Report No 33: To hear Edmund F. Mansure, Administrator, General Services Administration, August 3, 1955.
Progress Report No. 34: To hear Dr. Arthur S. Flemming, Director of the Office of Defense Mobilization, on defense mobilization programs, April 11, 1956.
Progress Report No. 35: To hear True D. Morse, Under Secretary of Agriculture, and Spencer S. Shannon, Director of the Office of Minerals Mobilization, Department of the Interior, on defense mobilization programs, April 16, 1956.
Progress Report No. 36: Study of supply and distribution of nickel, January 8, 1957.
Progress Report No. 37: Supplementary report to study of supply and distribution of nickel by the Secretary of Commerce, February 21, 1957.
Progress Report No. 38: To hear Franklin G. Floete, Administrator of the General Services Administration, on the activities of GSA under the Defense Production Act, May 21, 1957.
Progress Report No. 39: To hear the Director of the Office of Defense Mobilization and the Administrator of GSA on activities under the Defense Production Act, including loans and guaranteed loans, May 28, 1957.
Progress Report No. 40: Report on reducing our vulnerability to attack, June 4, 1957.
Progress Report No. 41: To hear the Director of the Office of Defense Mobilization and the Administrator of GSA on activities under the Defense Production Act, including aluminum contracts and tax amortization, July 30, 1957.
Progress Report No. 42: To discuss the adequacy of preparedness programs to meet nuclear attack and limited-scale war; to hear the Director of the Office of Defense and Civilian Mobilization and representatives of the Department of Commerce and the Department of Agriculture.
*First Annual Report of the Activities of the Joint Committee on Defense Production, 1951.
*Second Annual Report of the Activities of the Joint Committee on Defense Production, 1952.
Third Annual Report of the Activities of the Joint Committee on Defense Production, 1953.
*Fourth Annual Report of the Activities of the Joint Committee on Defense Production, 1954.
Fifth Annual Report of the Activities of the Joint Committee on Defense Production, 1955.
Sixth Annual Report of the Activities of the Joint Committee on Defense Production, 1956.
Seventh Annual Report of the Activities of the Joint Committee on Defense Production, 1957.

Activities of Departments and Agencies Having Functions Under the Defense Production Act

All Federal departments and agencies performing functions under the Defense Production Act, as amended, were requested to submit reports of their activities during the past year for inclusion in this report. These have been included in the appendix.

Also included in the appendix are the Defense Production Act of 1950, as amended, and Executive orders issued under authority of the act.

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*Supply exhausted; no longer available.

APPENDIX

OFFICE OF CIVIL AND DEFENSE MOBILIZATION

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF CIVIL AND DEFENSE MOBILIZATION,
Washington, D. C., December 3, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Washington, D. C.
(Attention of Mr. Harold J. Warren, clerk and counsel.)

DEAR MR. CHAIRMAN: I am pleased to submit to your committee the annual report of the Office of Civil and Defense Mobilization.

Sincerely,

LEO A. HOEGH.

I. INTRODUCTION

On July 1, 1958, the Office of Defense Mobilization and the Federal Civil Defense Administration were merged. The new agency is called the Office of Civil and Defense Mobilization (OCDM).

Creation of this new agency in the Executive Office of the President ended many organizational difficulties caused by the overlapping responsibilities of its predecessor agencies. It brought about, for the first time, an organizational base on which to build a unified national nonmilitary defense program.

In addition, prior to August 8, 1958, the devlopment of a fully coordinated national civil defense program was limited by the provision of the Federal Civil Defense Act of 1950 which stated that "responsibility for civil defense shall be vested primarily in the several States and their political subdivisions." On August 8, 1958, Public Law 85-606 became effective, providing that "the responsibility for civil defense shall be vested jointly in the Federal Government and the several States and their political subdivisions."

On October 24 the National Plan for Civil Defense and Defense Mobilization was issued. This document is a statement of principles, responsibilities, requirements, and broad courses of action. It will be supported by annexes which are extensions of the subject matter of the plan itself. It establishes national nonmilitary courses of action and the role of the Federal Government, the States, their political subdivisions and people generally.

This report has been prepared to reflect the functions set forth in the plan, because of the plan's importance as the guide for the civil defense and defense mobilization programs of government at every level. The heart of the national plan is parts V and VI covering functions for the protection of life and property and the mobilization and management of resources and production. These categories constitute sections II and III of this report. Section IV deals with supporting functions, as covered in part VII of the national plan.

Under a severe attack it is possible that the Nation would be reduced initially to a number of isolated local areas, out of touch with the Central Government. Accordingly, it is essential that survival planning be aimed at creating a maximum degree of local self-sufficiency. This means that necessary action plans must be widely disseminated and that local leaders and potential leaders must understand these plans and be sufficiently trained in the immediate survival actions required so they will be able to act independently of direction from Washington, but in a manner which will promote a reknittting of the American social, economic, and political system as quickly as possible.

While OCDM has devoted the major share of its efforts to the very difficult problems of massive thermonuclear attack, the possibility of other emergency situations must constantly be remembered. The national plan anticipates three possible contingencies: International tension—or cold war—but not of such

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extreme nature as to require the invocation of full emergency authorities; limited war, defined as a situation in which United States forces are engaged overseas, but in which there is no immediate expectation of nuclear attack on the continental United States; and general war, including massive nuclear attack.

II. Protection of Life and Property

A. CONTINUITY OF GOVERNMENT

Our survival as a nation depends upon the ability of the Federal, State, and local governments to carry out their responsibilities in the event of a massive attack. To make this possible, the continuity of government program is aimed at establishing lines of succession for key officials and personnel; preserving essential records; establishing alternate locations for Government operation; and making full use of all personnel, facilities, and equipment of government at all levels.

A great deal has been accomplished with respect to the major Federal agencies at the national level, although there still are severe limitations on the operational capabilities of the relocation sites. In general, the programs of Federal agencies in the field, and State and local governments are just getting underway.

1. Federal emergency relocation program

Forty-four Federal agencies, including emergency agencies, now have 93 relocation sites to carry on their seat of Government operations. Agencies have also established approximately 300 relocation sites for field activities.

While these sites represent substantial advances in readiness, their usefulness in an attack will require (1) sufficient warning of the possibility of an attack to permit their activation and (2) added protection against fallout. Thirty-eight agencies have administrative and communications personnel on duty, during normal working hours, at their relocation sites. Only 19, however, have decision-making personnel at the sites.

The most serious shortcoming of the sites is the lack of fallout protection. A sample group of relocation sites has been surveyed to obtain a representative cross section of the potential of the sites selected for emergency relocation purposes, and to acquire some concept of the scope and overall cost of modifications to existing facilities and/or new construction. Work is proceeding to secure estimates of the cost of providing protection against fallout.

Emergency transportation and mail service plans have been developed for headquarters sites. The General Services Administration is extending its emergency surface transport plan to include the field sites of the departments and agencies.

A revised civil-service registration plan has been issued to the agencies. Still to be issued are guides on family care, personnel administration and other administrative matters relating to the continuous manning of agency relocation sites.

The future course and development of the Federal emergency relocation program is now being revaluated to provide improved communications and more effective permanent staffing. Certain key agencies have recently designated policy-level officials and supporting staffs which are permanently located at the OCDM site to provide operational capability for the direction and control of Federal nonmilitary defense activities in event of attack.

2. Executive reserve

During the past year the national defense executive reserve program, established under the Defense Production Act and Executive Order 10660, has grown to a total of 1,183 reservists in 14 agencies, with an additional 843 under consideration.

A highly successful national conference, attended by over 1,200 reservists, employers of reservists and Government personnel, was held in Washington in November 1957. The President, the Vice President, and other high-ranking officials addressed the conference.

In May 1958 Defense Mobilization Order I–21 was revised to provide for expansion of the reserve to the regional level. During the coming year emphasis will be placed on recruiting and designating reservists for service in regional locations.

In order to increase the effectiveness of executive reserve training, arrangements are being made with the Industrial College of the Armed Forces to secure

suitable educational material for distribution to reservists. Training is now carried out by the agencies on an individual basis. Agency training programs consist of orientation sessions, periodic conferences and participation of selected reservists in Operations Alert.

The projected overall size of the reserve on a governmentwide basis remains to be determined. In the further development of the reserve, attention will be given to achieving proper representation from all segments of the economy and from various geographical areas; and to insuring adequate training for members so that they will be ready to perform effectively in an emergency situation.

3. State and local continuity of government

Developed with the assistance and advice of hundreds of State and local officials and governmental organizations, a program for State and local continuity of government was first announced by the FCDA Administrator at the annual meeting of the United States Civil Defense Council in Detroit on September 5, 1957.[1]

A Continuity of Government Office was established in FCDA on November 1, 1957, to administer and promote the program.

This program has been discussed during the past year with the 48 governors or their personal representatives, particularly emphasizing the need to establish emergency lines of succession within government. The program has also received the support of such organizations as the Council of State Governments, Governors' Conference, National Association of County Officials, United States Conference of Mayors, American Municipal Association, United States Civil Defense Council, National Association of State and Territorial Civil Defense Directors, and the American Legion.

When surveys showed that State legislation, and in some cases constitutional amendments, would be required to establish emergency lines of succession at the State and local level, FCDA urged each State to set up a legislative committee or other appropriate group to draft the necessary legislation. By June 30, 1958, FCDA had completed sample legislation covering lines of succession for the executive and judicial branches of government, and the Columbia University Legislative Drafting Research Fund had completed, under contract with FCDA, sample constitutional amendments for all three branches of government.

Official studies on establishing emergency lines of succession are now underway in more than 30 States.

A preliminary draft of a manual on preserving essential State and local government records was written for FCDA by the National Archives and Records Service. The draft, developed in consultation with State and local government officials, is now under review by OCDM.

While all States and many local governments have emergency relocation sites, relatively few State and local governments have emergency operating centers that could withstand the probable effects of a nuclear attack. Construction cost is a major factor. To help alleviate the situation, OCDM is revising the criteria for approving Federal matching funds for control center construction by State and local governments. Immediate costs to State and local governments were reduced by permitting construction phasing over several fiscal periods, and by encouraging the incorporation of control centers in new city halls, State office buildings, and other similar buildings.

The principle of making full use of all government personnel, facilities and equipment to meet a civil-defense emergency has now been substantially accepted by the governments of States and the larger communities. Survival plan contracts contain a clause that the plan must, in each case, make provision for the effective use of all State and local government parsonnel, facilities, and equipment. Implementation of these plans in terms of definite assignments and allocations for these three resources is just beginning. Additional Federal guidance and significant State and local accomplishments are expected in this area in the coming year.

B. REDUCTION OF VULNERABILITY

OCDM's program for reducing our national vulnerability involves individual or family actions, actions by industry, and actions by government. A balanced program must include shelters and protective devices, hardening and dispersal of

[1] The program was outlined in FCDA Advisory Bulletin No. 216; Continuity of State and Local Government, September 19, 1957.

facilities, controlled movement of people and materials, and adequate stockpiles of essential survival items. Actions to reduce industrial vulnerability are discussed in section III–C.

1. National shelter policy

The most significant development during the year was the announcement by the FCDA Administrator on May 7, 1958, of a national policy on shelters. It is based on the recognition that, in the event of nuclear attack, "fallout shelters offer the best single nonmilitary defense measure for the protection of the greatest number of our people."

The policy covers the following five points:

1. The Federal Government will bring to every American all of the facts as to the possible effects of nuclear attack, and inform him of the steps which he and his State and local governments can take to minimize such effects, including:

(*a*) Nuclear weapons effects on people, plants, and animals;

(*b*) Effective fallout protection; how to construct a fallout shelter, and how to improvise effective shelter;

(*c*) Necessary measures for the protection of food and water;

(*d*) How to carry out radiological decontamination; and

(*e*) What governments—Federal, State, and local—are themselves doing about fallout protection.

2. The Federal Government will initiate a survey of existing structures on a sampling basis, in order to assemble definite information on the capabilities of existing structures to provide fallout shelter, particularly in larger cities.

3. The Federal Government will accelerate research in order to show how fallout shelters may be incorporated in existing, or new buildings, homes, other private buildings, and governmental structures. Designs of shelters will be perfected to assure the most economic and effective types.

4. The Government will construct a limited number of prototype shelters with various practical peacetime uses, suitable to different geographical and climatic areas. These will be tested by actual occupancy by differing numbers of people for realistic periods of time.

5. The Government will provide leadership and example by incorporating fallout shelters in appropriate new Federal buildings hereafter designed for civilian use. Federal example is an indispensable element to stimulate State, local government, and private investment for fallout shelters. Community use of shelters in these new buidings is contemplated.

The national shelter policy does not contemplate a massive federally financed shelter construction program.

To implement the national shelter policy, OCDM requested $13,150,000 as part of a supplemental appropriation of $29,338,000. This request included $4 million for an expanded public information program; $1,850,000 to initiate a survey of existing structures on a sampling basis; $1,500,000 for research on incorporation of shelters in new buildings; $5,500,000 for experimental construction of various types of prototype shelters; and $300,000 for occupancy tests; and on August 27, 1958, $2.5 million was appropriated for public information, as part of a $4.5 million supplemental appropriation.

2. Reduction of vulnerability of Federal facilities

Aside from the emergency relocation program discussed above, very limited progress was made during the past year in reducing the vulnerability of Federal facilities.

The Atomic Energy Commission completed its dispersed headquarters at Germantown, Md., and moved in during January 1958.

Current Department of Defense protective construction policy is to build alert facilities, dispersed facilities or shelters as required to assure that at least minimum essential operational missions can be carried out under anticipated conditions of attack. The actual method of protection depends on the characteristics of the weapon system being defended, and the priority used is based on the strategic importance of the weapon system. Protection is applied to the equipment, supplies and personnel essential to carrying out the particular mission. Insofar as nontactical functions or personnel are concerned, the policy is to provide protection comparable to that provided for the population as a whole. Protective construction programs have emphasized SAC alert and dispersal facilities.

The Veterans' Administration has completed planning for 10 hospitals with basement space designed for operating rooms and allied facilities, as well as dining rooms and kitchens. This would provide ample shelter for patients and hospital personnel. Funds have not been available, however, for filters and other equipment essential to meet minimum standards for radiation protection.

3. State and local activities

State and local activities to reduce vulnerability are built around individual operational plans developed under the federally financed survival plan project, which was started in 1955 with an initial appropriation of $10 million.

Under the program, 45 States, 3 Territories ,and 173 metropolitan areas have conducted studies leading to the development of detailed operational plans.

At the end of the fiscal year, 26 States and 1 Territory had basic operational plans which were approved by FCDA. The target date for completing the rest of the plans in March 1959, but operational planning at the State and local level is expected to continue.

One important result of the survival project has been the development of small but competent staffs of State and local civil defense operational planning personnel. Throughout the Nation more than 1,000 persons have been working on State and local civil-defense operational plans under the survival project.

C. WARNING OF ATTACK

Warning is a major element in reducing casualties since the amount of warning time dictates the civil defense measures that can be taken. A strategic warning some days or weeks ahead of the attack would permit carefully planned evacuation of much of the population of our large cities, together with construction of many fallout shelters in the reception areas. Tactical warning several hours in advance of the attack would still permit a considerable degree of evacuation, and would allow some time to improvise shelters. The decision whether to evacuate or take cover is dependent upon time and conditions. If time and conditions permit, target cities and areas near assumed targets will evacuate to prepared reception areas. If time and conditions do not permit evacuation, it will be necessary to take cover in the best shelter available. In any case, action to be taken is a local decision.

At the present time, a warning time of 3 hours is still regarded as the maximum probable time in most areas. With the further development of intercontinental ballistics missiles, the tactical warning will be reduced to zero to 15 minutes. Nevertheless, our civil-defense plans and our individual responses must be sufficiently flexible so that we can take the best advantage of whatever amount of warning is available.

1. National warning system

The primary source of attack warning is the North American Air Defense Command. OCDM, through attack warning officers at NORAD installations, transmits the warning information to the States and other political subdivisions on the national warning system. The State and local governments are responsible for disseminating the attack warning to the public.

During the past year, 76 warning points in 33 States were added to the national warning system, raising the total number of warning points across the Nation to 276. Plans are being made to expand this network to 500 warning points as part of the groundwork for faster and more direct warning of enemy attack.

The network now consists of four OCDM warning centers at major Air Force installations,[2] 49 State warning points (including Washington, D. C.) and 227 other warning points. The network is capable of sending a warning to all 276 warning points in about 15 seconds.

2. Local warning systems

This network is tied to the many outdoor warning systems (usually sirens systems) installed by municipalities to warn the public of an enemy attack. A total of 129 cities are considered to have virtually complete coverage with their outdoor warning systems. However, there is still a problem of warning people in

[2] OCDM National Warning Center at North American Air Defense Command Headquarters, Colorado Springs, Colo.; OCDM Eastern Warning Center at Headquarters, Eastern NORAD region, Stewart Air Force Base, N. Y.; OCDM Central Warning Center at Headquarters, Central NORAD region, Richards-Gebaur Air Force Base, Mo.; OCDM Western Warning Center at Headquarters, Western NORAD region, Hamilton Air Force Base, Calif.

their homes or other buildings where the outdoor devices may not be heard. Research is continuing to develop internal warning systems by making use of existing power lines or telephone facilities.

Work is also continuing to complete the warning network in the Washington, D. C., metropolitan area. A system of sirens, scheduled to be completely installed in fiscal year 1960, will be capable of covering an area within a 20-mile radius of the center of the District.

D. DAMAGE ASSESSMENT

National coordination and control, and national decisions, after an attack must be based on rapid assessment of the damage and casualties and of the resources which remain for recovery. A national system using a high-speed electronic computer has been developed at the National Damage Assessment Center (NDAC), which is directed by OCDM. Fourteen Federal agencies now participate in the work of the center.

During the past year, there was increased participation by mobilization agencies in the activities of the NDAC. In preparation for Operation Alert 1958, analyses of the condition of national resources were prepared by OCDM and mobilization agency specialists, using NDAC data and damage assessment techniques. This advance preparation added considerable realism to the play of the exercise at the agency relocation sites.

A great deal remains to be done to aid decision-making concerning efficient allocation of the resources remaining after attack. One prerequisite to this is updating and filling gaps in the resource data files now being used by the NDAC. Another is the development of semiautomatic resource programing procedures which will capitalize on both human ingenuity and computer speed.

A beginning toward development of a regional damage assessment capability was made this past year. Regional preparations for extending hand damage assessment techniques and using available medium-speed computers will receive emphasis and direct assistance from the national level. Such preparations will greatly increase the regions' capabilities for effective operations in an actual emergency. Ultimately, assessment capability will be developed within State and local governments.

New computer programs have been developed to compute fallout maps for exercise purposes and to print the completed maps automatically. This saves tedious hand analysis and permits meteorologists to concentrate on more important problems associated with the use of radiological monitoring reports in the event of an actual attack.

Preliminary estimates of probable overpressure and radiation intensities and ranges have been computed for sets of monitoring points located throughout the Nation. These "survival probabilities" have been used to estimate the quantities of survival items that would be available from normal inventories and from production sources.

Improved means are being developed for (1) transmitting resource status estimates to the agency relocation sites and to the eight regional offices, (2) more rapid reproduction of resource summaries, and (3) immediate display of the status of principal resources on an automatic and continuing basis.

E. COMMUNICATIONS

The national plan states that the Federal Government will maintain a reasonably secure system of communications among the Federal agencies and to the States; the States will do the same with respect to their jurisdictions; and local governments will maintain communications for their emergency operations.

OCDM's primary system of operational communications is national communications system No. 1 (Nacom No. 1). It consists of about 20,000 miles of leased wire facilities—private line telephone and teletypewriter services—connecting OCDM's relocation site outside of Washington, with its Battle Creek office, its regional offices, and State civil defense offices.

Certain circuits of Nacom No. 1 can be used for both telephone (voice) or teletypewriter communication. The principal purpose of the system, however, is to provide a record communication medium, and therefore the circuits are used primarily for teletypewriter communication.

During the past fiscal year this system was improved to increase the speed of transmission and extend facilities for handling classified messages.

Preliminary design work was completed on a system of radio backup to Nacom No. 1. The radio network, scheduled for installation in fiscal year 1959,

will be called Nacom No. 2, and will provide for two-way radio communication between OCDM's relocation site, Battle Creek office, and regional offices.

Tied into Nacom No. 1 is an interagency communication system which connects the relocation sites of the key Federal agencies in the Washington area. This system also handles classified traffic and is being developed to achieve a reasonable degree of protection against attack.

Many agencies have communications systems to their field offices. Some of these are Government-owned and some are leased lines. Surveys are underway to determine to what extent these various systems can and should be interconnected.

At the State and local level, the radio amateur civil emergency services (RACES) program has continued to expand. About 1,000 State, area, county, and city RACES operational plans were approved by the end of the year. Only two States do not have RACES plans, but several localities in each of these States do have accepted plans.

F. MAINTENANCE OF LAW AND ORDER

Local government is the basic entity responsible for the emergency maintenance of law and order. The national plan calls for State law-enforcement forces to support local police as necessary. Only upon the request of a State government, or in the event a State government is unable to act, will the Federal Government assume and exercise necessary Government functions. Upon request, the Secretary of Defense will provide emergency military aid to the civil authority to assist in maintaining law and order, provided it does not interfere with the conduct of primary military missions.

One of the major purposes of the State and local continuity of government program is to assure that these governments do, in fact, retain the capability to preserve law and order. This function is also an important part of the State and local operational survival plans. The OCDM police services program, developed with the advice and assistance of outstanding law-enforcement officials, stresses the attainment of maximum capability in the following functions:

(*a*) Supervision and regulation of emergency traffic in mass population movements or movements of personnel, equipment, and supplies essential to the support of the Armed Forces and the overall national economy;

(*b*) Prevention and control of disorder, hysteria, mob action, crimes of violence, looting, vandalism, sabotage, and subversive activities during and after evacuation;

(*c*) Maintenance and restoration of law and order at assembly areas; and

(*d*) Protection of critical installations and stocks of essential supplies and equipment.

Programs serving these objectives are in various stages of development throughout the United States.

Despite these first steps, a great deal more needs to be done in this field both to build operational readiness and to better understand the nature of the problems that we would face. Maintenance of law and order is basically a matter of maintenance of social control in a period of crisis. While considerable research findings are now available on human reactions under conditions of extreme stress, additional research in this field is required.

G. DISASTER SERVICES

Disaster services include casualty care and emergency public health, emergency welfare services, rescue, debris clearance, fire protection, and decontamination. These are the traditional services of civil defense. The national plan and its annexes prescribe responsibilities for disaster services and the State and local operationl plans implement them.

Disaster services are largely a local responsibility. The national plan provides that local governments would direct the movement of populations away from danger areas, commit disaster forces under their control as required by the situation, and notify the States of deficiencies, or excess capabilities. The States would do the same for broader areas, turning to the OCDM regional directors when their capabilities proved deficient.

Many of the disaster services will be relatively less effective in civil defense because of the magnitude of modern thermonuclear weapons and the problem of fallout. A few especially important jobs might have to be carried out in areas of lethal radiation intensities but the principal theater of disaster services would

be in zones of tolerable radiation intensities—zones which would become progressively larger as radioactivity decayed. Rescue, debris clearance, and fire-fighting would be limited in initial disaster operations because of the excessive radioactivity in the blast and fire-affected areas.

Instead, the emphasis would be on emergency health care and welfare services in the areas of tolerable radiation intensities.

1. Emergency health care

Because of the extreme shortage of health supplies and services in a massive attack, we need a radical revision of our traditional concepts of standards of care for the surviving population. National survival may require that we establish priorities to place emphasis on health services for those people who will be able to contribute to the survival effort. Those of the population who are in a low priority group as regards eligibility for organized professional care and those who are isolated by direct bomb damage or fallout would be dependent upon self-help.

Progress has been made in developing priorities and standards for the allocation and use of health resources. General priorities and standards for personal health care and sanitation services have been developed and were refined during Operation Alert 1958.

However, existing plans to mobolize and utilize health resources are not yet adequate to take full advantage of the limited resources that will be available following an attack on the United States. State survival plans are quite uneven in their health content because of the uneven health planning resources in the several States. The enactment of Public Law 85–606 will provide the basis for strengthening the States' capabilities by Federal grants of administrative funds. Similarly, the public is not adequately informed of the dangers of nuclear radiation and other health hazards and most individuals are poorly prepared to protect themselves against those dangers.

Action is now being take to delegate comprehensive authority to the Department of Health, Education, and Welfare for planning and administering health services in an emergency. That Department, through the Public Health Service, has the field relationships with State and community health services which will be vital in the event of an attack on the United States.

2. Emergency welfare services

Emergency welfare services embrace all the service and assistance required to meet human needs for food, clothing, and lodging; to furnish information on the condition and whereabouts of persons; and to register persons in attacked areas for use in reuniting families separated during evacuation.

OCDM, in cooperation with the Department of Health, Education, and Welfare, Agriculture, Interior, Post Office, and the Housing and Home Finance Agency and numerous professional social welfare, and business organizations, is developing plans to assure emergency care of people. OCDM is currently placing emphasis on increasing the Federal Government's ability to guide and assist State and local governments to attain maximum practical capability to cary out emergency welfare functions, and, in the event of nuclear attack, to be able to give maximum Federal support to them.

While the responsibility for distributing existing supplies of food and water is a local one, covered by local survival operating plans, these plans are not yet coordinated with Federal supply responsibilities. As mentioned in section III-D, plans are being developed to make use of the 3,000 Department of Agriculture local offices to assist local civil defense personnel in managing food.

Because of the immobility of people in fallout areas, the national plan places the responsibility upon individuals to have a 2-week supply of food and water. Individuals cannot look to outside help during this period. Unless they, themselves, provide this minimum supply of food and water, many might not survive.

Housing is a problem which would increase with time after an attack. In the radiation-free areas, housing might not be a problem during the first few days. Many refugees, however, could be expected to arrive from the fringe areas when it was permissible to do so or when their food and water ran out. Standards of occupancy would need to be established and the influx of population billeted. Maximum utilization would need to be made of existing residential structures (homes, hotels, motels, trailers, etc.) and suitable nonresidential structures, including those under construction. In addition, it probably would be necessary to add to the supply of housing on a temporary basis.

Local civil defense officials have given recognition to these facts in their survival operating plans but detailed procedures, billeting standards, and arrangements for adding to the supply have not yet been worked out. The Housing and Home Finance Agency, under delegation from OCDM, has begun the development of a national plan for housing, which will augment local civil defense plans.

H. PROTECTION FROM DELAYED OR UNCONVENTIONAL WEAPONS

The national plan assigns Federal, State, and local responsibilities for protection against clandestine and unexploded ordnance, chemical and biological warfare agents, and radiation.

The Federal Government assists State and local governments in developing explosive ordnance reconnaissance capabilities through Army explosive ordnance detachments that function under policies and procedures promulgated by the Continental Army Command.

The Public Health Service, Food and Drug Administration, and Department of Agriculture are doing research and planning related to defense against biological and chemical warfare.

Radiation, however, is the most significant of these problems and, accordingly, OCDM's radiological defense program is receiving priority attention. The program is made up of a number of parts—operational planning, shelter, instrumentation, monitoring, training, public information, and research.

1. Radiological defense

A radiological defense plan is being developed as an annex to the national plan. The plan assigns radiological defense responsibilities to Federal, State, and local governments, and provides the guidelines for the development of State and local radiological defense plans. Additional guidelines have been developed through a New England study for FCDA by Technical Operations, Inc., of Burlington, Mass. The study resulted in a draft, "Radiological Defense Planning Guide," which is now under review.

The fallout shelter program has already been described.

The number of radiological instruments distributed to States and Territories for radiological defense training and operational preparedness has been more than doubled during the past year. By the end of the fiscal year more than 76,000 instruments had been distributed to States and Territories as compared with 35,000 at the end of fiscal year 1957. The total included more than 40,000 survey meters, 24,000 dosimeters, and 11,000 dosimeter charges.

In addition, nearly half a million instruments are stored in OCDM warehouses for rapid distribution in the event of a national emergency, and OCDM has loaned or transferred nearly 50,000 instruments to 11 other Federal agencies to improve the operational readiness of the Federal Government.

These quantities represent only a small first step toward the number of instruments required to provide adequate radiological defense.

A program has been started to establish a Federal network of radiological monitoring stations which could provide hourly reports on the level of fallout radiation across the Nation after a nuclear attack. The network will be composed of existing Federal personnel and facilities. Initial aim of the program is to establish radiological monitoring stations at 700 fixed field facilities of the United States Weather Bureau and the Federal Aviation Agency (formerly CAA). During fiscal year 1958 those two agencies began their field facilities with radiological survey instruments, and training field personnel to use the instruments.

OCDM plans to expand this network by using the personnel and facilities of other Federal agencies. The aim is to have at least 1 Federal monitoring station in each of the more than 3,000 counties in the United States.

As the result of FCDA training programs some 2,500 instructors in radiological monitoring and 75,000 radiological meter readers had been trained by the end of the fiscal year.

In addition, a radiological defense high school program was developed in cooperation with the Office of Education, departments of education in the States, and State civil defense directors to—

1. Help high schools incorporate radiological defense education into their science courses, and

2. Improve the geographical distribution of radiation detection instruments.

Scheduled to start early in fiscal year 1959, the program includes the distribution of a specially designed radiological instrument kit to 15,000 high schools

throughout the United States. The kit consists of 4 survey meters, 4 dosimeters, a dosimeter charger, 2 containers of a harmless, low-intensity radiation source, and an instruction manual on using the instruments.

III. Mobilization and Management of Resources and Production

A. Development and Maintenance of Essential Resources

As set forth in the national plan, the Federal Government will assure the existence and availability of resources necessary for expanding, maintaining, or restoring essential production and distribution processes. Such resources include raw materials, finished goods, facilities, essential services, and manpower. The objective is to be able to meet requirements in four categories: (1) Military materiel, (2) atomic weapons and equipment, (3) domestic needs for capital and consumer goods and services, and (4) assistance to foreign areas.

The Federal Government is charged with stimulating the development and maintenance of reserves of such essential resources through seven types of programs. These are discussed below:

1. State, local, and private inventories

The national plan recommends that individuals be prepared to exist on personal stock of survival items in homes and shelter areas for 2 weeks following attack. It urges State and local governments to have emergency supplies and equipment sufficient for 4 weeks following attack. The Federal Government will develop general reserves which can be drawn upon as needed after this period.

It is currently estimated that the average household contains only a 4-day supply of food, although this could be stretched with personal rationing. Similarly, State and local inventories of survival items and civil defense equipment are small, although some start has been made through Federal contributions, as discussed elsewhere in this report.

For the future, OCDM plans to assist the States in building stockpiles of emergency supplies and equipment. If funds are available, OCDM will totally finance some essential resources, such as emergency hospitals, radiological defense monitoring instruments, and emergency water supply distribution units. Federal contributions for other resources will be made on a 50–50 basis. In addition, major emphasis will be placed on public information and education to encourage as much improvement as possible in voluntary individual and family responsibility.

2. Federal stockpiles

The Federal Government maintains many stockpiles of importance to civil and defense mobilization. These include strategic and critical materials inventories, civil defense inventories, Commodity Credit Corporation food inventories, and machine tools inventories.

Strategic and critical materials.—The Federal Government now has supplies of strategic and critical materials meeting stockpile specifications valued at $6.4 billion (June 30, 1958). This includes materials valued at $5.4 billion in the national stockpile; $243 million in the supplemental stockpile; $473 million in Defense Production Act inventories, and $221 million in Commodity Credit Corporation inventories obtained through barter of agricultural surpluses.

The general policies for the strategic stockpile have been revised, after a critical review, to bring them in line with the latest concepts for overall emergency planning.

The Special Stockpile Advisory Committee, a non-Government group appointed by the Director of ODM in October 1957, reported in late January 1958 that the stockpiling of strategic and critical materials is still a major element of any preparedness program. The report of the Special Stockpile Advisory Committee, entitled "Stockpiling for Defense," was released by the Director of ODM on January 29, 1958. Some of that committee's recommendations are reflected in the policies that were issued in Defense Mobilization Order V–7, effective June 30, 1958.

That order stated that strategic stockpile planning should provide for adequate quantities of materials for a 3-year war, rather than a 5-year war as was assumed in previous planning. Accordingly, the interim recalculation of stockpile objectives meant an automatic improvement in the extent to which stockpile objectives have been met, and also brought about larger surpluses of some materials. The status of the strategic stockpile, as of June 30, 1958, as well as

a discussion of the policies that were issued in DMO–V–7, is shown in the January–June 1958 issue of the Semiannual Stockpile Report to the Congress.

A directive has been issued to General Services Administration for fiscal year 1959 strategic stockpile procurement. Materials to be purchased from the open market are amosite asbestos, small diamond dies, and muscovite block and film mica. A portion of the quantity authorized for diamond dies is reserved for domestic production as a means of encouraging development of this vital industry. Additional quantities of materials already in Government inventory will be processed to the following forms to provide minimum readiness inventories for the initial stages of an emergency period: oxygen-free copper, ferromolybdenum, molybdic oxide, tungsten carbide powder, and ferrovanadium. Other materials to be taken only from DPA and CCC stocks are antimony, Jamaica-type bauxite, bismuth, cobalt, and silicon carbide. Purchases of jewel bearings from the sole domestic facility at Rolla, N. D., will continue under a fiscal year 1958 authorization.

The strategic stockpile, despite some shifts in emphasis, is still primarily designed for a war not involving extensive damage to the United States. It has little relevance to the immediate survival period although it would prove very valuable in the later rehabilitation period.

Civil defense items.—The existing civil defense stockpile, valued at approximately $200 million, involves primarily medical items. It was planned in early 1952 to meet an attack by low-yield atomic weapons, and a probable need to take care of 5 million casualties for 21 days, at a cost of approximately $411 million. The stockpile has reached only about 50 percent of this original and now inadequate goal. Rotation of only 6 percent of these stocks is currently being accomplished. In addition, the warehouses, although outside urban areas, are above ground and are not protected against radioactive fallout. Supply requirements studies now going on will provide a better statistical basis for any future goals which may be set for this stockpile.

Although no money was appropriated to purchase additional stockpile items in fiscal year 1958, $3.14 million was appropriated to store and maintain existing stocks. As part of the maintenance program certain antibiotics and vaccines that were about to become outdated were replaced from manufacturers' stocks at a fraction of their original cost. In addition, 61,358 units of outdated plasma were reworked by various contractors into serum albumin at about 25 percent of the original cast.

OCDM has 10 stockpile maintenance service shops and 11 radiological maintenance service shops at its warehouses to maintain emergency hospital equipment and radiological defense instruments.

On June 30, 1958, the civil defense stockpile contained health and radiological defense items valued at about $193 million and enginering items (including generators, chlorinators, water purifiers, pumps, and pipe) valued at about $7 million.

The breakdown for medical and radiological defense items was as follows: 932 emergency civil defense hospital units, 10,317,500 burn dressings, 3,187,000 blood recipient sets, 1,580,000 units of blood derivatives (plasma and serum albumin), 4,550,000 units of plasma expanders, 32,500 gas masks, 6,188,000 doses of atropine, 57,151,000 doses of vaccines and antitoxins (part of the manufacturers' storage), 1,534,000 paper blankets, 308,000 litters, 243,000 radiological dosimeters, and 163,000 radiological survey meters.

Food.—The Department of Agriculture has substantial stocks of surplus foods. The Commodity Credit Corporation currently has on hand agricultural commodities accumulated under price-support legislation, valued at about $5.6 billion, with additional quantities valued at about $1.6 billion pledged against loans. These stocks are reasonably well dispersed. For example, the Commodity Credit Corporation has bin storage facilities with a capacity of about 991 million bushels of grain in 909 counties in 21 major grain-producing States. None of these bins is in a critical target area and very few are within the areas immediately adjacent to the target area cities.

In addition, substantial stocks of many foods are maintained in commercial inventories. The following table shows the 1957 stock of United States food products as a percent of 1957 domestic civilian utilization. Post-attack utilization would, of course, be less because of the reduced population.

Pursuant to the Agricultural Act of 1956, the Department of Agriculture has made a continuing study of the possible need for stockpiling of food for emergency use in the event of attack. A comprehensive report on this subject was

submitted to the Congress in January 1957. In this report the Department concluded that stockpiling of food for emergencies would present extensive difficulties and involve substantial costs and that the inadequacy of suitable warehousing facilities, the difficulties of management and rotation of supplies, and other problems are such as to make stockpiling on a large scale undesirable if it can be avoided without undue risk to the population.

Estimated United States food stocks on selected dates as percent of annual needs

Item	Use per capita (pounds)[1]	Percent of 1957 needs in stocks[2]				
		Jan. 1, 1957	Apr. 1, 1957	July 1, 1957	Oct. 1, 1957	Jan. 1, 1958
Meats, poultry, and fish:						
Carcass meat	159.0	2.1	2.4	1.8	1.1	2.1
Fresh and frozen fish	5.6	14.6	14.3	17.2	21.6	16.0
Poultry ready to cook	31.1	6.2	5.0	3.6	5.0	4.1
Eggs, fresh equivalent	49.6	1.6	1.9	3.8	2.9	1.8
Fats and oils:						
Butter	8.7	1.6	2.8	10.0	9.9	1.7
Margarine	8.2	2.0	2.5	2.1	2.0	2.4
Shortening, including lard	20.3	6.9	7.6	6.9	5.3	6.3
Other fats and oils	13.2	37.7	33.5	27.9	22.0	34.1
Other dairy products: [3]						
Condensed and evaporated milk	15.8	8.8	3.5	14.2	16.9	8.7
Dry milk [4]	5.5	8.6	8.4	17.1	11.3	9.4
Cheese (aged only)	8.0	18.5	28.7	34.4	36.7	19.6
Fruits and vegetables: [4]						
Fresh and frozen fruit and juice	103.9	12.5	6.9	5.5	10.9	13.0
Canned fruit and juice	35.5	44.5	36.9	35.3	49.8	43.7
Dried fruit	3.6	99.2	49.6	22.0	132.2	82.6
Potatoes, white and sweet	150.8	41.3	18.3	3.2	55.9	36.7
Other fresh and frozen vegetables	140.7	6.0	3.2	2.9	4.3	5.1
Canned vegetables	44.0	78.4	53.4	41.7	110.4	70.3
Dry beans and peas	9.5	104.3	71.2	35.0	123.0	82.6
Other foods:						
Wheat and rye (grain equivalent)	218.8	245.0	195.3	148.9	265.5	227.4
Rice (milled equivalent) [4]	5.9	344.9	240.1	308.8	101.7	121.0
Sugar, cane and beet (raw value)	103.4	21.8	20.8	15.2	9.4	22.0
Peanuts (kernel basis)	6.1	81.4	50.0	31.5	30.9	64.1
Coffee (green basis) [4]	15.8	18.1	17.2	14.4	13.1	13.7
Tea [4]	.6	39.2	39.2	39.2	39.2	41.1

[1] Includes food and nonfood domestic uses, except military.
[2] Stocks in all positions, except in retail and wholesale establishments.
[3] Does not include products used fresh or frozen.
[4] Based on unofficial estimates of stocks.

Source: U. S. Department of Agriculture, Feb. 4, 1958.

Operation Alert studies indicate that ample supplies of food are already available in the CCC and other stocks but that the problems of distributing the existing food would be formidable. While, statistically, foodstuffs and food facilities would probably be in adequate supply after an attack, it does not follow that sufficient edible food would be available at the time, in the places, and in the quantities necessary to meet the needs of the surviving population. A great deal more needs to be done to achieve adequate readiness to meet these needs in the immediate postattack period.

Machine tools.—The Federal Government owns some 325,000 machine tools, valued at $3.25 billion. Most of the tools are owned by the military departments; some are in the National Industrial Equipment Reserve, managed by GSA. Efforts are continuing to complete a central inventory of these tools, which will include information on age, condition, and location. When this is completed in the next few months, this information will be of immeasurable value in mobilization production planning for all end items made with machine tools. The location information is particularly vital for assessing damage to metalworking facilities after an attack.

To prevent the wasting away of these tools, DMO VII–4, revised, provides for nondefense use only with prior OCDM approval. Through June 30, 1958, ODM received 103 requests for approval, involving 2,983 items, costing $34.2 million. Only 44 of these requests have been approved, involving items costing $18.9 million.

Variations in production equipment leasing practices had created inequities between contractors owning their own tools and contractors using Government tools. Uniform practices to be followed by all tools-owning agencies have now been established under DMO VII–4, revised. The Department of Defense reports that sections of the Armed Services Procurement Regulations are being revised to implement the order.

Plans are in progress for the substantial enlargement of the National Industrial Equipment Reserve (NIER) over a 3-year period and for the channeling of many more tools to schools through the surplus property donation program of the Department of Health, Education, and Welfare. In addition, a pilot operation is being initiated under which a complete complement of tools is to be lent from the NIER to a State industrial training center. If this experiment proves successful, it is planned to lend NIER tools to other similar training centers.

3. Preallocation of contracts

Since 1948, the Defense Department has had a production allocation program, under which tentative mobilization production schedules for military items are planned with specific manufacturers. Some 23,000 industrial plants have been registered for participation in the program for planned production of a variety of important military items.

The objectives of this production planning for periods of national emergency or mobilization were changed significantly with the issuance of DOD Directive 4005.13 on March 27, 1958, which specified that military production planning will consider the eventualities of (1) a general war which would involve a severely damaged industrial base, and (2) a limited war with an undamaged industrial base.

The general-war assumption emphasizes prewar readiness without major reliance on postattack production. Planning for postattack production has been limited to the production and maintenance of an extremely selective group of vital items. This planning also considers dispersal, alternate sources, and other reasonable measures which may be useful to assure continuity of production or to maximize deliveries from surviving plants.

Planning for production during a limited war emphasizes industrial readiness for immediate adjustment to accelerate production.

OCDM has developed a program for the preallocation of machine tool production contracts which is administered by GSA. To provide for full production of the machine tools industry at the outset of an emergency, contracts are being entered into now for activation on M-day. Up to this time, 87 percent of these contracts, covering 92 percent of the total number of items to be included, have been signed. Production on these contracts will begin only on written notice to the producers after M-day and such notices will be sent only if the situation clearly indicates a need for the tools included in these M-day pool order contracts.

4. Development of substitutes for imported resources

It is estimated that about $15 million on contracts under Defense Production Act borrowing authority has dealt with research and development concerned, at least in part, with domestic substitutes for imported items which might not be available in wartime. Examples of these are the successful development of large-scale production of castor beans and extra long staple cotton, and the current efforts to develop synthetic mica.

5. Development of new domestic sources for essential resources

The operations of the Defense Minerals Exploration Administration in the Department of the Interior, undertaken under the Defense Production Act, ended on June 30, 1958. It was determined that the exploration program could no longer be justified as a defense measure and should be undertaken by the Department of the Interior as part of that Department's regular functions. On August 21, 1958, the President signed Public Law 85–701, authorizing and directing the Secretary of the Interior to provide for discovery of additional domestic mineral reserves, to establish and maintain a program of minerals exploration by private industry within the United States, its Territories and possessions, and to provide Federal financial assistance on a participating basis for that purpose. This program is now being carried out by the Office of Minerals Exploration in the Department of the Interior.

To meet mobilization requirements for jewel bearings, normally imported from Switzerland, the Government has, for 10 years, supported a plant at Rolla, N. Dak. The Department of Defense was recently asked to encourage its con-

tractors to obtain as many jewel bearings as possible from this plant in order to maintain this facility in operation without accumulating a large stockpile inventory which may become obsolete. However, production needed to maintain this plant in operation which cannot be sold to industry will be added to the strategic stockpile within the limits of stockpile objectives.

6. Expansion of productive capacity

Expansion of the production component of the mobilization base has been encouraged in the past by accelerated amortization for tax purposes, loans and loan guarantees, and purchases and commitments to purchase.

Financial incentives.—During the past year the last of the expansion goals were closed and the accelerated amortization program was restricted by the new legislation.

On August 26, 1957, the President approved Public Law 85–165 amending section 168 of the Internal Revenue Code of 1954. Under the amendment, certificates issued after August 22, 1957, are limited to facilities (*a*) to produce new or specialized defense items or components thereof (excluding services), and (*b*) to provide research, developmental or experimental services for the military departments, or for the Atomic Energy Commission. Issuance of necessity certificates was suspended from August 22, 1957, through March 4, 1958, when the new regulation promulgated under the amended law was approved and published.

During the past year, $127 million in defense expansions was certified, of which $76 million of the costs was eligible for accelerated amortization. Substantially all of the certificates issued during the past year have been for expansion of facilities for research and development, missiles and military aircraft. There were 299 applicants for necessity certificates pending on September 1, 1958.

No loans or loan guaranties were made during the past year.

Similarly, no new purchase commitments were made under the Defense Production Act borrowing authority. However, decreased demand for strategic materials by industry resulted in larger than expected deliveries to the Government under previous contractor-option contracts. Consequently, the requirements for working capital increased and caused some upward adjustments to be made to the estimates of probable ultimate net cost. Expenditures in fiscal year 1958 on these outstanding contracts amounted to $441 million.

Accordingly, on July 31, 1958, only $300 million of borrowing authority remained available in the revolving fund for future operations. This amount is estimated to be sufficient only for the balance of fiscal year 1959 requirements if deliveries to the Government are made at estimated levels.

A bill (S. 4162) was introduced in the Senate to amend the Defense Production Act so that approximately $300 million in losses and nonrecoverable expenses could be written off and the Treasury notes canceled. A hearing was held on July 28, 1958, before the Senate Committee on Banking and Currency, but Congress adjourned before further action was taken.

7. Control of exports and imports

Section 8 of the recently enacted Trade Agreements Extension Act of 1958 (Public Law 85–686) continues the authority formerly in section 7 of the 1955 Extension Act, to protect the domestic mobilization base from impairment by imports. The OCDM Director is charged with investigating applications, requests, or motions that imports of an article are entering the United States in such quantities as to threaten to impair the national security; and to advise the President if, as a result of such investigation, he is of the opinion such a threat to the national security exists. In addition, section 8 delineates the criteria which the President and the Director shall consider in determining whether or not imports may impair the national security, and makes certain changes in the administration of the section.

Through August 15, 1958, 15 petitions had been filed under section 7 of the 1955 act. The petition concerning crude oil was certified to the President as threatening to impair the national security. Four petitions, concerning cordage; clocks, pin-level watches, and timers; jeweled watches; and wool textiles, were denied. Two petitions, concerning dental burs and heavy electrical generating equipment, are currently under study. The remaining eight petitions were withdrawn or are presently inactive for various reasons.

The oil petition was first filed on August 7, 1956, by the Independent Petroleum Association of America. Following public hearings, the ODM Director, on

April 23, 1957, certified to the President he had reason to believe that imports of crude oil were threatening to impair the national security within the meaning of the law.

In June 1957, the President established a Special Committee to Investigate Crude Oil Imports under the chairmanship of the Secretary of Commerce. The Committee's investigation led it to recommend in July 1957 that a plan of voluntary limitations on imports be adopted by importing companies. The President accepted the Committee's recommendations and the plan was put into effect.

More recently, on May 28, 1958, the ODM Director recommended to the President, in concurrence with the Special Committee, that the importation of petroleum products be placed under the cognizance of the Committee, in order to guard against any possible circumvention of the crude oil program. The President accepted the recommendation and, on the advice of the Special Committee, has directed the initiation of a program limiting the importation of unfinished gasoline and oils.

The voluntary plan is administered by the Department of the Interior and the need for continuing it will be reviewed periodically. The Special Committee remains in existence to keep the situation under continuing study.

B. RESERVES OF CONSUMER END PRODUCTS

For the last couple of years a study has been underway to determine what consumer end products would be needed for survival in a civil defense emergency and what the supply-requirements balance would be. This study will provide a basis for developing programs to assure necessary reserves.

The first supply-requirements analysis of medical items under the national survival supply-requirements program will be completed in the fall of 1958. The official list of survival items has now reached a point of virtual stability. Large scale survey programs have been completed by the Departments of Commerce, Agriculture, Health, Education, and Welfare, and other resource agencies. They are designed to improve the statistical base for making informed supply-requirements analyses of survival items, leading to the determination of final objectives at an early date.

The calculation of supply versus requirements is a continuing function due to changing assumptions. However, the overall program has reached a point where a well-defined long-range action program for medical items, including the need for stockpiling, should be available within the next 2 or 3 months. The development of programs for other survival items should be possible a few months later.

Civilian survival items may now be obtained by barter of surplus agricultural commodities under the criteria for administration of the supplemental stockpile approved on May 28, 1958. The Secretary of Agriculture has established an Interdepartmental Supplemental Stockpile Advisory Committee for Barter to advise him on barter acquisition in relation to the supplemental stockpile. Utilization of barter to help meet other civil-defense requirements is being explored.

C. PROTECTION OF THE NATIONAL INDUSTRIAL PLANT

The national plan states that the Federal Government will contribute to the reduction of vulnerability of the national industrial plant through programs for physical protection, including dispersal; continuity of management; maintaining multiple sources of supply for mobilization requirements; and stimulating voluntary agreements to provide for combinations or exchanges of resources during emergency.

DMO I–19, setting forth the Government's policy regarding industrial dispersion, is still in effect. In view of the virtual ending of the accelerated amortization program, there are no real incentives for dispersion at the present time. Nevertheless, the Departments of Defense and Commerce continue to offer dispersion advice to businessmen who request it and there appears to be a growing interest on the part of business in considering dispersion when planning new facilities.

The continuity of industry program as it applies to the voluntary cooperation of industry with Government to develop industrial defense plans, was largely suspended during the past year. The burden of implementing this program was carried by the Department of Commerce through its industrial defense staff which was abolished in 1957 as a result of drastic appropriation reductions. The Department of Defense, however, has continued its activities in connection

with the industries on its key facilities list. OCDM is continuing a limited program through its staff college, field conferences, and publications.

The importance of continuity of industry warrants more attention than it has received. The extent to which such a program should be limited in terms of selected industrial facilities, essential for survival, remains to be answered. Whether it is possible to develop an effective continuity of industry program on a purely voluntary basis or whether Federal incentives will be necessary remains to be determined.

Programs of the Department of Defense to develop and maintain multiple sources of supply were detailed in ODM's May 20, 1957, report to the Joint Committee on "reducing our vulnerability to attack." There have been no significant changes in these programs since that time.

No programs have yet been developed to stimulate voluntary agreements among industries and industry members to provide for expeditious combinations or exchanges of resources during emergency.

D. PREPARATIONS FOR RESOURCE MOBILIZATION AND MANAGEMENT

The national plan states that the Federal Government will continuously assess the ability of the national economy to meet all mobilization and civil-defense requirements, and will develop programs for the emergency control of the economy.

The following discussion deals with the assessment of the ability of the economy to meet requirements and the preparations that are being made for control of the economy in the various resource fields.

1. Supply requirements studies

The second-round supply-requirements analysis mentioned in last year's report has been completed. The results of this analysis indicate that the United States economy is able to produce without any further expansion all of the war goods needed to fight a war of the World War II type in duration, although there would be limitations on goods, other than foods and textiles, and services available to civilians about equal to those imposed in World War II. This analysis did not consider the additional requirements to get forces in being, survival items and shelters which would probably be generated by the increased threat of attack.

New military requirements submitted late in the spring of 1958 were sharply reduced, and preliminary results of this supply-requirements analysis, now underway, indicate that the economy can meet all of the military requirements without reducing civilian goods and living standards. However, although the military concepts which underlie this last set of requirements are for nuclear warfare, they include no assumption of bomb attack on this country, and to this extent the more than adequate supply of resources indicated above does not tell the whole story.

Later this year, another round of military requirements will be computed by the Department of Defense. These requirements will cover both limited war with an undamaged industrial base, and general war with a severely damaged industrial base.

The primary need now is for studies of a general war situation in which the base would be damaged and unusual needs would arise for productive capacity to meet survival and rehabilitation requirements. Considerable progress has been made in studying survival requirements. A study has been started on our postattack ability to rehabilitate and reconstruct the economy after an attack on this country. Projects are now underway to identify the vital industries and industrial processes and to obtain information which would be necessary to rebuild such industries and provide for their restoration in places that would be less vulnerable to attack.

2. Operating plans

Two major mobilization readiness plans were kept under constant development and review during the past year. Plan C is designed to deal with an international situation of the utmost gravity, short of general war, in which United States forces have become engaged in overseas military operations. It assumes an increased threat of attack on the Continental United States. Plan D-minus is designed to deal with surprise attacks on the United States so crippling in their effects that military strength would be seriously reduced, the national economy would come to a virtual standstill, the Government would be disrupted, and millions of casualties would result.

Both plans were substantially tested in Operation Alert 1957, and plan C was reviewed thereafter. It is now in the process of revision. The basic principles contained in D-minus were again tested in Operation Alert 1958 as exercise actions. A great many of the action documents were published in the Exercise Federal Register and given wide distribution. Also, during the year, the more important parts of plan D-minus were reviewed and approved for planning purposes.

The plans list and briefly describe the major emergency actions required to meet the described situations. Many of the documents have been fully cleared, reviewed, and could be promptly issued if so desired. However, they are in no sense planned to be issued automatically, but rather after evaluation of the situation.

Much remains to be done to refine and develop these plans as annexes to the national plan for civil defense and defense mobilization.

3. Emergency resources management

Central programing of resources in an emergency period has been discussed over a long period of time, but until a few months ago had not been established as a separate staff function. OCDM now has a group concentrating on this area. Many aspects of this type of operation are yet to be worked out and tested, and work will be applied to development of a smooth management operation in the coming year.

In Operation Alert 1958, supplies and requirements for more than 60 survival items were analyzed. There is a fair capability at the national level to carry forward such a function in the event that an emergency occurs before working plans are fully perfected, but much must be done to improve regional capability to submit requirements to the Federal Government. Operation Alert also indicated that it is possible to install an automatic system of reporting resources and requirements which will give Central Government relocated out of Washington more knowledge of the needs of the country at an earlier date than was previously thought possible.

In past mobilization periods, it has been the custom for the various resource agencies to handle the bulk of the work connected with allocating scarce resources, and under existing emergency planning, it is contemplated that these functions would again be delegated to the various resource agencies. However, the experience of Operations Alert 1957 and 1958 have indicated that central resource management is not possible unless policies can be laid down by OCDM which will insure that all agencies direct their resource uses to specific priority programs. At the present time, no solution has been found for the problem of establishing policy without a fundamental basis for requirements and supply figures. Emphasis will be given to this problem in the next year.

4. Food

The county, State, and regional offices of the Department of Agriculture have the personnel and potential capability for handling postattack food management problems and plans are being developed to make use of them. In Operation Alert 1958, Agriculture directed its over 3,000 county and State offices to offer their assistance to local civil defense officials in handling food problems. This resulted in relatively little exercise play but it did mark a start which can be expanded next year.

Both the distribution of existing food and the production of new food after attack would require supplies of transportation, fuel and power, and the organization necessary to handle them. This means that greater efforts will have to be made by all resource agencies to exchange requirements information and make provision for adequate supplies of the resources to support food production and distribution.

Fallout creates many problems in the food area. Radioactive isotopes, particularly of iodine, could kill many livestock and make a large part of the postattack milk production unusable as fluid milk for several months. Strontium 90 could result in some areas being unsuitable for crop production for many months. The fallout danger would force many farmers to stay in basements or shelters with the result that in those areas, some types of livestock, particularly poultry, might die from neglect. Monitoring equipment is needed so farmers would know when it was safe to resume the care of crops and animals.

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5. Health

Maintaining and restoring the health of the population is a primary requirement for defense and survival after attack. The need for health services after a massive nuclear attack would be immediate and overwhelming. None of the health resources is today adequate to provide health services at the presently accepted levels for the noncasualty population and the casualties after such an attack. We could produce and stockpile sufficient health supplies and facilities with adequate financial outlay. Health manpower, however, cannot be stockpiled.

Therefore, it is imperative that plans be made to use highly trained professional personnel for the more demanding tasks and to train auxiliary health personnel to take over duties requiring lesser skills, which under normal circumstances would be performed only by the highly trained individuals. Only in this way can health services be supplemented and conserved to meet the demands.

Information is deficient on the medical care facilities and community facilities essential to health and sanitation of the country, and what can be done to (a) decrease their vulnerability, (b) expand their capacity, and (c) regulate their use after enemy attack.

Considerable information has recently been collected regarding health supplies. Most producers of essential health supplies are located in critical target areas; normal inventories at all levels are inadequate; adequate provision has not been made for dispersed storage.

As previously mentioned, action is now being taken to delegate authority to the Department of Health, Education, and Welfare for planning and administering the use of health resources.

OCDM will continue to be responsible for the overall control of the Nation's health resources and for allocation as required between the military and nonmilitary population.

6. Housing

The Housing and Home Finance Agency is responsible for mobilization readiness planning in the housing field. During the past year it has improved its mobilization plans, begun the task of preparing documents and regulations to implement these plans, selected regional relocation sites, and appointed 21 executive reservists.

To the extent that funds and personnel permit, work will be continued on improving the structure for emergency operations; the draft plan for billeting refugees will be improved; and the details and operating instructions for providing emergency housing and community facilities will be completed.

Because of its immobility, housing was far more vulnerable to the Operation Alert 1958 attack pattern than was the population. As a result, by 2 weeks after the attack we were trying to rehouse about half of the population. As an emergency expedient all of the population could be put under roof for the first 90 to 180 days by extreme crowding of available housing plus the use of all other usable structures. Over an extended period of time, however, the resolution of the shelter needs would require construction of temporary shelter units. Additional requirements would probably arise from the movement of essential workers into key production areas having a shortage of housing.

7. Manpower

With realization that in the early states of attack, reliance must be placed on local initiative in meeting local problems, emphasis during the past year has been placed on developing better guidance for regional, State, and local manpower officials. Whenever possible, unclassified policy guidance papers are being developed and put into the hands of local officials. These papers will provide knowledge of the authorities which will be available to such local officials and policy guidelines within which they are to operate.

Wartime organization plans for manpower mobilization have been improved substantially. Agreements have been reached with the National Science Foundation, the Maritime Administration, the Railroad Retirement Board, and the Civil Service Commission on the roles which these agencies will play in civilian manpower mobilization. In planning for manpower mobilization these agencies will work under the general guidance of the Department of Labor.

During this past year tentative procedures were developed for making a rapid estimate of manpower requirements as against supply for use in the initial stages

of resource management postattack. A test of this procedure, which is in effect a test of the adequacy of the manpower plan generally, was a principal objective of the manpower part of Operation Alert 1958.

8. Materials

Materials planning contemplates the release of strategic and critical materials from the strategic stockpile for survival purposes after attack upon request of the OCDM regional directors. GSA and Agriculture would be directed to determine the postattack condition and availability of the materials in the strategic stockpile and Interior would be directed to assess damage to minerals raw materials facilities and appraise surviving production capacity.

Outright losses from the strategic stockpile resulting from the attack phase of Operation Alert 1958, due to blast or thermal effects were rather light considering the magnitude of the attack. Fallout rendered much of the stockpile temporarily inaccessible but a substantial portion of the 75 kinds of materials, located in 220 strategically dispersed storage sites, was available by the end of 3 months after the attack.

9. Fuel and energy

Little progress has been made to date in developing a field organization for emergency management of energy and minerals. A nucleus of executive reservists exists in the field but they are not well informed as to overall plans and their mobilization roles. The fallout problem was introduced for the first time to the bulk of utilities personnel participating in Operation Alert 1958.

Petroleum fuels are likely to constitute one of the most critical shortages in event of attack. The lack of transportation, in turn, is the biggest handicap to fuel availability. One possible action would be the conversion of natural-gas pipelines to crude oil or petroleum products service. While power capacity tends to be more dispersed than power users, repair of lines and interconnecting operations would be severely hampered by fallout. Details are being completed for radiological training courses for utility personnel. Solid fuels are the least vulnerable of the power and fuels group.

The Foreign Petroleum Supply Committee, which assists the Government in the collection of data on foreign petroleum operations and recommends plans of action in event of emergencies, was called together as a result of recent Middle Eastern developments. The action was taken to enable the Government to act quickly should the Secretary of the Interior find it necessary to make a declaration that an emergency exists outside this country which threatens to impair United States mobilization interests.

10. Production

Mobilization planning for production emphasizes the task of getting the remaining postattack industrial facilities back into operation. Production is highly specialized on both a product and geographic basis with its parts extraordinarily interdependent. In Operation Alert 1958 emphasis was placed on analyzing these interconnections, as distinguished from direct damage to individual plants. The exercise again indicated that the time required to reestablish the production system is a limiting factor in the resumption of production.

11. Stabilization

Operation Alert 1958 again confirmed that the priority problem for nuclear attack preparedness in the economic and financial areas would not be one of fighting inflation and shortages, but would be one of striving to restore, rehabilitate, and cause to function our monetary and economic system in whatever fragmentary form it might exist after a massive attack.

In view of this and based on the damage assessments for the hypothetical attack tested during Operation Alert 1958, it appears that the emergency plans and operations of the Government are headed in the right direction in connection with maintaining the economy in undamaged regions of the Nation, although much remains to be done to achieve effective readiness. It is doubtful our present preparedness status could cope with the chaos in some of the more severely damaged regions, which would probably face the collapse of the regional exchange and economic systems. To overcome this, OCDM is undertaking to develop and place in local hands preattack, those basic financial and economic guidelines and objectives which might guide local responses to attack in such a way as to prevent financial and economic collapse and make it possible for a revived Federal Government to reweld a viable national economy from the surviving fragments.

To promote this preparedness objective, guidelines for State and local emergency economic operations were distributed throughout the country and tested during the 1957 and 1958 Operation Alert exercises. They cover steps needed to initiate local administration of price and rent stabilization and rationing to cope locally with the problems of inflation and shortages. OCDM has delegated to the Department of Labor responsibility for preparing similar emergency measures for a wartime wage and salary stabilization program. These guidelines, in their revised form, also suggest local action with respect to banks and financial institutions.

The ability and readiness of regional, State, and local units to function on their own during an interim emergency period needs to be developed further. This program will call for much more direct work with regional executives, State governors, and mayors and other local officials. In addition, much work remains to improve local stabilization techniques and to develop satisfactory local rationing procedures and operating plans.

The greatest gap in economic planning, however, is the lack of effective and identifiable national fiscal and monetary policies for extreme emergency situations that may follow massive atomic attack. This requires the development of programs for equitable distribution of the burden of war damage among the surviving population, centralized control and coordination of all Federal lending operations and all Federal and State payments to individuals or others, and assuring the solvency of the banking system and the protection of the Federal credit under extreme damage situations. The President has directed a high-level group in the Government to study these subjects and make recommendations to him in this field.

While economic preparedness to deal with massive attack is receiving maximum attention, work continues on promoting readiness for economic action in less-than-nuclear attack situations. In general, preparedness is sufficient to permit prompt action in connection with emergency economic stabilization operations in such situations.

12. Telecommunications

Executive Order 10705, approved April 17, 1957, vests in the OCDM Director full responsibility for the direction of United States telecommunications upon declaration of war or following an attack upon the United States. This Executive order, together with Executive Orders 10312 and 10460, forms within OCDM the basis of all mobilization planning for United States telecommunications.

A machine recordkeeping unit of the Interdepartmental Radio Advisory Committee, comprising five persons, below the policy level, has been established at a relocation site. At this location are maintained duplicate card records of the Government and non-Government radio frequency assignments. This contingent will form the nucleus of an advance cadre of an emergency communication agency. The organizational structure of this agency has been determined and key positions identified. Steps have been taken to recruit and assign qualified communication personnel from industry through the executive reserve program, and from agencies of the Government.

Emergency telecommunication programs and procedures which have been developed include provision for the priority use and resumption of vital telecommunication service, as well as tentative procedures for the claiming of essential telecommunication service and related resources under a situation in which the United States is attacked. A plan has been promulgated for Government use of certain common carrier channels of communication to overseas points during emergencies.

Dual-purpose planning by industry for increased service to the public, together with reduced vulnerability, has made progress during the year. Already installed and in operation are submarine cables between the United States and the United Kingdom, between Seattle and Ketchikan, Alaska, and between the United States mainland and Hawaii. Plans have been completed and work has actually started on a second transatlantic telephone cable connecting the United States with the European Continent. Present scheduling calls for its completion in October 1959. Another new submarine telephone cable between the United States and Puerto Rico is scheduled for completion in 1960. Long-range plans for the construction by the telephone companies of a nationwide system for bypassing critical target areas is approximately 90 percent complete, with early 1959 set as the goal for completion of the original program.

13. Transportation

A revised version of the plan for effective utilization and control of the Nation's transportation systems in emergency was tested in Operation Alert 1958. The organizational pattern as now developed, with minor modifications, will be adopted and a standby organization will be established. This skeleton standby organization will extend in strength into the field level using existing Government transportation personnel and relying heavily upon the industry through the executive reserve program. With the completion of this program for a standby organization, the emergency transportation plan will be given operational capability.

Standby orders developed for the effective utilization of transportation have been reviewed with the intent of extending to each order the maximum flexibility for operations under varying types of conditions.

Planning for the civil reserve air fleet has advanced and arrangements and procedures have been developed for a ready and practical activation of this fleet. The program is now recognized at State levels.

A program is being developed to inform carriers on radiation hazards and methods of operation of routes and facilities under fallout conditions. During Operation Alert 1958, a representative group of transportation industry officials was indoctrinated in the general situation and special problems that could be encountered under attack conditions.

During the past year, operational emergency movement plans were developed in connection with approximately 49 State and Territory and 174 area survival plans. These involved close planning coordination between highway and traffic engineers, police, officials, and transportation operating organizations. Federal assistance was given through contributions for standard evacuation route signs in some 30 States and installation of centralized traffic control in one large city.

Programs have been initiated, in cooperation with the Bureau of Public Roads, Department of Commerce, for improving the capability of State highway departments in highway planning, damage assessment and rehabilitation, traffic control and radiation monitoring.

14. Wartime censorship

Principal activity in censorship planning during the past year was devoted to the preparation and review of a self-triggering voluntary censorship code for all public media. Plans for dissemination of the code have been developed and it is proposed that the standby code be released this fall.

IV. Supporting Functions

A. RESEARCH AND DEVELOPMENT

OCDM research is primarily applied research directed toward the practical application of science to the problems of civil defense. FCDA obligated nearly $3.5 million for research in fiscal year 1958—an increase of more than 20 percent over the previous fiscal year. This work, although under contract to other Federal and non-Federal groups, was directed and coordinated by FCDA.

Highlights of the research program in the major categories of radiological defense, shelter studies, warning and communication, health and medical care studies, social and economic research, and operational planning, follow:

1. Radiological defense

The many ongoing research projects in the radiation field are indicative of the priority which OCDM places on this program.

The National Bureau of Standards has made good progress on basic studies of the characteristics of radiation produced by nuclear weapons, the penetrability of radiation in various construction materials and buildings, and methods of protecting the population from penetrating radiation. The results of these studies are used in developing radiological defense plans.

Technical Operations, Inc., of Burlington, Mass., has begun a study to experimentally evaluate radiation shielding provided by large structures. It will result in a detailed procedure for use by engineering contractors in fallout shelter surveys.

Tests at the Nevada test site have been conducted jointly by the OCDM, the Bureau of Standards, University of California, and the Atomic Energy Commission on the radiation shielding provided by residential structures.

The Naval Radiological Defense Laboratory has been developing information and criteria as a base for planning and implementing large-scale radiological rec-

lamation operations. One immediate object of the study is determining the feasibility of various large-scale reclamation procedures, including the "cost" in terms of radiation exposure, financial, and logistic factors. NRDL also started work on the development of a radiological reclamation manual for the OCDM which will contain information on operational procedures in radiological decontamination and other reclamation actions applicable to industrial, residential, and rural areas.

A number of projects have been devoted to development of improved radiological survey instruments.

The University of California has a continuing research program aimed at providing techniques for use in radiological defense planning, covering shielding, means of estimating fallout probabilities and methods of developing fallout contour maps, variations in fallout distribution in urban areas, assessment of knowledge of biomedical effects of radiation, effects of mass fire on fallout deposition, and effects of fallout on water resources.

The United States Weather Bureau has expanded its earlier study of upper wind data to provide the basis for fallout probability charts. The results of the project will be available for civil defense planning and will be used in radiological defense studies at the University of California.

A study carried out in the New England area by Technical Operations, Inc., Burlington, Mass., resulted in drafts of model State and local radiological defense plans. The model plans, which are based on the use of existing resources have been distributed for comment and are now being reviewed by OCDM.

2. Shelter studies

Engineering field tests of structures and equipment were conducted in the fall of 1957 at the Nevada test site. These included tests of reinforced concrete dome structures, dual-purpose concrete mass shelters, family shelters, French and German shelters, protective vaults, thermal activated air-zero locators, pressure-sensitive valves and ventilation equipment, and the behavior of certain shelter doors under blast loadings. Plans have been made to conduct additional tests to determine the effects of shock in deep underground tunnels.

A contract has been signed with Eberle M. Smith Associates, Inc., of Detroit, for the design of three dual-purpose fallout shelters for elementary schools.

The Armour Research Foundation of Chicago has started a study of the vulnerability of deep rock shelters involving a technical review of geological formations and an analysis of the shock effects of surface-burst nuclear weapons to determine the vulnerability of deep rock shelters. Sites, such as New York City, Chicago, Pittsburgh, Detroit, Kansas City, and Cleveland will be investigated to determine the influence that local geology has on the degree of protection offered by deep rock shelters.

3. Warning and communications

A research project has been completed on methods of transmitting a warning from a telephone exchange to all subscribers. The system as demonstrated by field tests was not considered economically feasible.

The Midwest Research Institute of Kansas City, Mo., is developing a national emergency alarm repeater powerline warning system which can transmit a nationwide warning to users of electric power who have a special warning receiver. Several prototype warning receivers will be tested to develop a reliable, inexpensive receiver that may be plugged into any ordinary 110-volt alternating current outlet.

4. Health and medical care studies

Studies of the biological effects of blast have been conducted by the Lovelace Foundation for Medical Education and Research of Albuquerque, N. Mex., with support by OCDM and AEC.

A continuing study by the United States Naval Radiological Defense Laboratory on biological aspects of nuclear radiation has produced interim reports but no basic conclusions. Areas of study include the diagnosis and treatment of radiation injury, internal radiation hazards, biological effects of deeply penetrating radiation, surface effects of radiation, metabolic and pathologic changes produced by radiation, and the determination of individual and species differences in susceptibility to radiation.

The engineering research and development laboratories of the Corps of Engineers have started a study to develop procedures for removing nerve gas from water by using the facilities and chemicals available in conventional municipal water treatment plants.

Agreements have been reached with the Army Chemical Corps for final engineering tests and completion of procurement documents on a previously designed civilian protective mask (CD–805), and an infant protector.

The American Medical Association is directing a study for OCDM to develop the planning, training, and operational organization needed as a basis for a national emergency medical care plan. The AMA commission on national emergency medical care has appointed three task forces, representing medicine, surgery, dentistry, veterinary medicine, nursing, and public health, to complete the study.

5. Social and economic research

Three studies were completed during the past year analyzing human behavior during natural disasters. Dr. Harry E. Moore, professor of sociology at the University of Texas, produced a report entitled "Tornadoes Over Texas—A Study of Waco and San Angelo in Disaster" in which he analyzed the social disorganization and the recovery of the two Texas cities following large-scale disasters. The disaster research group of the National Academy of Sciences directed a project for the agency entitled "A Study of Formal Organizations in Hurricane Audrey" which evaluated the manner in which formal organizations of Government, the American Red Cross, and other groups and individuals, dealt with the disaster conditions. The disaster research group also directed for the agency a study of the human, social, management, and other factors and problems involved in the stranding of 800 persons in a Pennsylvania Turnpike restaurant during a March 1958 blizzard.

The agency and the disaster research group jointly developed a series of major sociopsychological findings on human behavior under disaster and war conditions and described their applicability to conditions of nuclear warfare.

The Survey Research Center of the University of Michigan conducted a survey in the latter part of 1957 of the effects of the sputnik launching on public attitudes toward fallout, the imminence of war, and the need for protective measures such as shelter. The findings were correlated with earlier public opinion and attitude surveys conducted by the center to produce data on public opinion and attitude change.

The Business and Defense Services Administration of the Department of Commerce started a project in March 1958 which has as its purpose improving the ability of the Federal Government to estimate the requirements for and the availability of certain essential civilian supply items in a national emergency. Various exercises, such as the annual Operation Alert, have demonstrated the inadequacy of this type of information. This project is to correct this inadequacy by surveying the availability of essential survival items, supplying tapes for inclusion in the resources file of the National Damage Assessment Center, and developing techniques for quickly determining the location and quantity of survival items.

6. Operational planning

During the past year the Stanford Research Institute conducted a study of the offensive and defensive capabilities of Russia and the United States so that the civil and defense mobilization job of this Nation could be seen within an overall offensive-defense framework. The study is used by OCDM to develop estimates of how certain civil defense actions could influence the total defensive and retaliatory power of the Nation. An outgrowth of this research project was an analysis, developed for the Federal Government, of the survival of the population after a massive attack in 1965. Such studies and analyses are used in developing basic civil defense operational plans for the Nation.

Columbia University has developed a model State constitutional amendment which, if adopted, would enable State legislatures to pass laws on lines of successions for essential positions in the executive, legislative, and judicial branches of government.

During the coming year, greater emphasis will be placed on research in the economic and resources management fields.

B. TRAINING AND EDUCATION

The best planning, research, and operational equipment will fall short of providing adequate civil and defense mobilization unless people understand what has to be done, and are trained to do their part of the job. OCDM carries on extensive training and public information programs to strengthen this vital link in civil and defense mobilization preparedness.

During the past year, FCDA instructors conducted 43 training courses which were attended by 1,163 persons. This raised to 15,550 the total number of persons who have received instruction in FCDA training schools.

Four schools were operated: the Staff College; the Radiological Defense School; Rescue Instructor Training Center; and a newly established Eastern Instructor Training Center at Manhattan Beach, Brooklyn, N. Y.

The Rescue Instructor Training Center at Olney, Md., was closed at the end of the fiscal year, but rescue training is scheduled as part of the curriculum at the Eastern Instructor Training Center.

Emphasis was given to radiological defense training, and more than 400 persons attended 14 courses presented by the Radiological Defense School at Battle Creek, in each agency region, and at the new Eastern Instructor Training Center.

The Staff College gave 8 courses to a total of 263 persons. The courses were Elements of Nonmilitary Defense for State and Local Officials, State and Local Action in Natural Disasters, Emergency Management and Operations for State and Local Officials, Emergency Management and Operations for County Officials, and Federal Action in Major Disasters.

Two courses were given in the field by a traveling team. In addition, 9 States gave 16 civil defense courses to a total of 772 persons as a result of contracts made with the Staff College.

The new Eastern Instructor Training Center, opened on June 9, 1958, will be used to train instructors who will return home and train others in the procedures and skills required for effective emergency operations. Plans are being made to open a similar center in the West.

The Nation's school systems are a major resource available to advance the concepts of civil and defense mobilization. FCDA worked with the United States Office of Education and recognized national education organizations to make use of this resource. For example, lectures on aspects of radiological defense were given at 55 seminars attended by some 3,000 high-school science teachers during fiscal years 1957 and 1958. The Office of Education has prepared a manual, "Nuclear Teaching Aids and Activities," which is scheduled for publication in fiscal year 1959 and distribution to high-school science teachers.

The Adult Education Association and the National School Boards Association cooperated with FCDA in preparing five publications to describe the civil-defense responsibilities of specific educational groups. Some 100,000 copies of the new publications, Civil Defense for Adult Americans and School Boards Plan for Disaster Problems, were distributed. In addition, a contract was made with the American Association of School Administrators to have that organization cooperate with OCDM in preparing a civil-defense support publication in fiscal year 1959, and a contract was negotiated with the George Peabody College for Teachers, Nashville, Tenn., to develop civil-defense curriculum materials for use by teacher-training institutions throughout the Nation.

During fiscal year 1958, FCDA produced 30 new publications, 3 motion pictures, 11 television and radio station-break announcements, 69 magazine articles, and 91 new releases as part of its public-information program.

A wallet-size civil-defense preparedness card, which describes the attack warning signals and the main actions families should take to prepare themselves for a possible enemy attack, was distributed to more than 21 million persons throughout the Nation.

A Handbook for Emergencies, developed by OCDM, was distributed by the Boy Scouts of America on October 11, 1958, to more than 40 million homes.

OCDM's public-information program currently emphasizes implementing the national policy on shelters and the self-help aspects of the national plan.

C. FEDERAL ASSISTANCE

Under the terms of the recently enacted Public Law 85–606, the Federal Government, for the first time, is allowed to help pay essential personnel and administrative costs of State and local civil-defense organizations. This legislative change should make it possible to increase Federal financial assistance to the States in future years and to make these funds more effective in contributing to a coordinated national preparedness program.

Federal matching funds contributed to States, Territories, and possessions for civil-defense programs amounted to 45 cents per capita in fiscal year 1958, as compared with 38 cents per capita in 1957.

From the start of the program in fiscal year 1952 through fiscal year 1958 nearly $80 million in matching funds has been contributed by the Federal Government. At least an equal amount has been spent by States and localities.

In the early years of the program Federal contributions were used primarily for health and special weapons defense items. Recently, however, States and localities have used most of the money to buy communications equipment. The trend was continued in 1958, with about 60 percent of the contributions money being used to buy communication equipment.

Since 1957, when Congress authorized making Federal surplus property available to States for civil-defense purposes, surplus equipment valued at more than $35.6 million has been donated for this purpose. Most of the total ($31 million) was donated in fiscal year 1958.

Motor vehicles and trailers, electrical equipment, fire-fighting and rescue equipment, construction and excavating equipment, communication equipment, tractors, engines, and hand tools made up more than 70 percent of the surplus equipment donated to States under this program in 1958.

D. TESTS AND EXERCISES

Among the tests and exercises held during the past year were Sentinel II and Operation Alert 1958. Sentinel II was a "command post" exercise at FCDA headquarters in December 1957. Civil-defense directors of 7 States, 7 cities, and representatives of 20 Federal agencies worked on a simulated problem of formulating actions to insure an adequate food supply for the Nation following a nuclear attack.

Operation Alert 1958 consisted of a three-phase exercise which had the following objectives:

(1) To determine the local and State governments' capability to cope with an attack situation on the basis of their own resources and determination of the kinds of Federal assistance needed, and how to utilize such assistance;

(2) To determine the Federal Government's capability to meet these demands and the adequacy of Federal guidance and mobilization plans to meet the attack situation;

(3) To determine the preparedness measures which, if taken preattack, would make the postattack job more manageable; and

(4) To train personnel in local, State, and Federal Government in habits of thinking needed to cope with emergency conditions.

In order to carry out these objectives it was decided that a time-phased exercise, which would allow ample time between phases for analysis of each preceding phase, was necessary. Therefore, Operation Alert 1958 was divided into three phases:

(1) Phase One, the attack phase, May 6 and 7, when primary participation was by the State and local civil defense organizations;

(2) Phase Two, Federal action phase, July 14–18, where primary participation was by the Federal agencies;

(3) Phase Three, evaluation phase, September 17–19, where Phases One and Two were evaluated by groups of experts in the various areas being tested.

The time between the attack phase and the Federal action phase was used to make a comprehensive analysis of damage effects at State, regional, and national levels.

Major emphasis in the Federal action phase at both the regional and national levels was placed on the capability of the Federal Government to maintain direction and control, and to provide support to State and local authorities. Actions were taken by participants on the basis of their estimates of the situation. Deficiencies or limiting factors were considered to be major aspects of this part of the exercise and exercise reports will form a basis for continued analysis.

Recommendations resulting from the final evaluation should lead to a material improvement in our national readiness to meet an emergency situation.

DEPARTMENT OF COMMERCE

THE SECRETARY OF COMMERCE,
Washington, September 18, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States, Washington, D. C.

DEAR MR. CHAIRMAN: In your letter of August 14, you requested a factual summary covering the mobilization activities of this Department for the past year. The Department is pleased to submit this report herewith for whatever assistance it may be in the preparation of your committee's eighth annual report to the Congress. As you well know, a high degree of interest by the Congress in mobilization programs is an absolute necessity if real progress is to be made in this field by the executive branch. To the extent that the efforts of your committee can forcibly bring to congressional and public attention these programs, as well as their associated problems and possible solutions, to that extent will our national preparedness be advanced.

You will recall that, in the statement to you on April 23 of this year, it was noted that progress in the field of nonmilitary defense has been rapid during the past several years—but not rapid enough to keep pace with the technological development and the related threat to national survival which make nonmilitary defense necessary. This Department still holds to this view, maintaining at the same time that a single Department or even an entire branch of our Federal Government can hardly advance very far ahead of the others on a unilateral basis. There is no question about the conclusion in the seventh annual report of your committee, that "The big defense preparedness job for the nuclear age still lies ahead." The question is whether new solutions, adequate to the new threat, can emerge without a greater public acceptance of the reality of that threat.

The attached report on the mobilization activities of this Department covers certain overall Department programs, followed by the programs of our constituent bureaus and offices having mobilization functions. Your particular attention is called to three areas in which important progress has been made in this past year. First, the Business and Defense Services Administration's component of the national defense executive reserve, having gone through its organizational stage, now shows promise of becoming an asset beyond our original expectations. Second, a real step was made during the Operation Alert 1958 exercises toward an integrated operation of emergency transportation functions; and third, the concept of emergency operations on a regionally managed basis has made much headway in the agencies of this Department, in the light of probable capabilities of national headquarters in a period following nuclear attack.

Among the many problems yet to be resolved are three of special importance.

Our agencies require clearer statutory and executive authority that would specifically recognize emergency preparation as a regular rather than as an exceptional function of Government. This would reduce the necessity for emergency activities to lean upon, or rather, encroach upon the staff time and resources of equally important peacetime activities.

Greater support must be given to a more secure physical plan for the emergency housing of our mobilization activities, backed by at least a minimum of protective construction, if there is to be reasonable assurance that the key functions of this Department will not be paralyzed in an emergency. For leadership in this, we look to the Office of Civil and Defense Mobilization, whose newly formed existence as a unified central command is a most encouraging development.

Lastly, we cannot expect to progress as far as national security demands until the great value of nonmilitary defense as a war deterrent is better recognized as well as its more obvious value for the saving of life and for reconstruction in the event of actual catastrophe. In this matter, surely, your committee has a great task.

Sincerely yours,

SINCLAIR WEEKS,
Secretary of Commerce.

Attachment.

MOBILIZATION ACTIVITIES OF THE DEPARTMENT OF COMMERCE

PART I. MOBILIZATION ACTIVITIES AT THE DEPARTMENTAL LEVEL

The principal mobilization activities of the Department, as distinguished from the specialized activities of its constituent agencies, are described below.

EMERGENCY ADMINISTRATIVE SUPPORT

Plans and programs are maintained to provide administrative support for the functions that would be performed in an emergency by the present bureaus and offices, as well as for those functions that may be transferred to other agencies. Such support for emergency production functions and emergency transportation functions was assigned as a responsibility of this Department by the Director of the Office of Defense Mobilization with the approval of the Secretary of Commerce.

1. *Emergency Operations Manual (classified security information).*—A manual has been prepared containing standby emergency administrative orders and instructions that would provide the written authority and procedures for necessary reorganizations and realinement of functions within the Department. This manual is maintained on a current basis to reflect current developments or changes in emergency plans.

2. *Emergency personnel management.*—An administrative order has been issued on personnel management under emergency conditions. Copies of essential personnel records have been provided at the Department relocation sites. Two cadres of personnel specialists have been selected to report to relocation immediately upon receipt of an alert in order that a nucleus personnel staff may be available. However, it should be noted that the present personnel and fund situation gives no leeway to furnish such a nucleus staff prior to an actual emergency without forcing a coresponding curtailment of essential peacetime personnel management activities in the Department headquarters.

3. *Communications.*—A Commerce Communications Corps of 120 members has been organized, under the direction of the Department's communications officer, by means of part-time collateral duty assignments to qualified persons in the various bureaus and offices. Members of the corps are designated as "relocatees" and are given mobilization assignments in the emergency communications system of the Department. A thorough technical training program is carried on for these members in cooperation with the Army Signal Corps, the Office of Civil and Defense Mobilization, and commercial communications agencies. Included are instruction and practical experience in the encoding and decoding of classified cryptographic messages, operation of multiple position PBX switchboards, teletype and telephoto receiving and transmission, and communications procedures peculiar to military, governmental, and commercial communications networks. Special communications equipment and circuits have been in place and operative at relocation sites and maintained in continuous year-round capability by a small duty staff. Communications Corps trainees are rotated for short tours of duty to familiarize them with this equipment and with the appropriate procedures at the sites. The provision of immediate communications at a time of emergency is considered to be the most important single utility of the relocation sites, and this has been amply demonstrated during the last several Operation Alert exercises.

4. *Relocation sites.*—As part of the governmentwide relocation plan, the Department retains emergency relocation sites for departmental and bureau use during emergency exercises or in the event of actual emergency. While these sites are adequate, at least on a temporary basis, for most of the initial emergency operations of the Department, there are two notable shortcomings. First, there is little protection against radioactive fallout, and without such protection no assurance can be given for their successful operation. Second, these sites are not adequately manned throughout the year with executive and technical personnel who would be qualified to carry on the essential functions in an emergency without reinforcement from Washington. The continuous staffing of sites by the number and level of personnel fully capable of assuming such authority and responsibility, permanently stationed near the sites with their dependents, would constitute an insurance policy of great value. However, one of the most difficult problems in this regard, as long as Washington remains the active seat of government, is how to give highly qualified people the type of assignments at relocation sites which fit economically into normal peacetime operations. Therefore, the

principal value of the sites at present is as strategic operational facilities currently used for (*a*) their communications capability; (*b*) a depository for basic essential records, and supplemented by shipments of current essential records throughout the year; and (*c*) operating space for readiness exercises, such as Operation Alert 1958, in which successful redeployment of national headquarters personnel is assumed. Further review is being given to this entire problem, including review of the adequacy of the present geographic locations.

5. *Civil-defense activities.*—Under departmental auspices, training programs have continued in the "conventional" civil-defense fields of building warden service, fire fighting, first aid and rescue. In the last several years over 3,500 employees completed a standard 24-hour course in first aid, and more than a fourth of this number completed a 12-hour advanced course. Substantial, though lesser numbers, have received training in the other fields mentioned above. These programs are being continued, and to this has been added the "new" field of radiological defense. The objective of the radiological defense program is to assure that every employee of the Department obtains at least a basic understanding of radiological hazards and precautions, and that a sufficient number of employees be further equipped to use radiation detection instruments or otherwise assist in radiation monitoring operations. The growing realization of the significance of radioactive fallout, and the focusing of national civil-defense efforts on this problem, require that knowledge and skills in this field be disseminated by appropriate training as rapidly as possible. In this effort, which is only in its early stages, the Department draws personnel into the training classes on the basis of official released time from their usual employment. The Department will continue to pursue energetically a training program that will enable it to meet its own requirements and be of assistance to other governmental agencies.

EMERGENCY PLANNING ACTIVITIES

In addition to the mobilization programs of constituent agencies, certain supervisory and planning activities have been in progress at the departmental level. The more extensive of these are as follows:

1. *Planning for transportation mobilization.*—The Under Secretary for Transportation is concerned with the emergency plans of those transportation agencies for whose direction and policy guidance he is responsible to the Secertary. These agencies—the Bureau of Public Roads, the Civil Aeronautics Administration, the Defense Air Transportation Administration, and the Maritime Administration—constitute the largest concentration of agencies having transportation responsibilities within the executive branch. Planning for transportation mobilization is a continuing activity of his office, and has recently required additional time and staffing, primarily for the development, in cooperation with the Office of Civil and Defense Mobilization, of plans to facilitate activation and operation of an emergency transport agency, should the situation so demand.

During Operation Alert, 1957, and again in 1958, the Under Secretary for Transportation was appointed as the acting head of an emergency transport agency. In the 1957 exercise, each major transportation service formed a separate structure within the agency, with regional operations separately supervised by the individual services. The test of this organizational concept was useful in pointing to the need for greater coordination at the regional and local level under conditions that might be expected to exist subsequent to massive attack. Realization of this deficiency led to the formulation of an organizational structure following functional rather than service lines, and providing policy control at the headquarters level with operational control at the regional level. Partial testing of this organizational structure in OPAL, 1958, revealed its practicality. The national headquarters operated effectively and exercise problems were solved expeditiously. Though regional sites were handicapped by shortages of trained personnel, the experience was sufficient to demonstrate the potential effectiveness of the plan. Refinement and continued testing of this concept is deemed advisable in conjunction with the increasing emphasis on regional participation in future operation exercises.

2. *Planning for production mobilization.*—The Secretary is charged with the responsibility for planning the Government's program to assure the most effective use of the Nation's production capabilities in an emergency. The greater part of this planning is carried out within the Department's Business and Defense Services Administration, whose detailed report is appended.

It will be recalled that during the Korean episode of 1950–53, the Department's National Production Authority was the agency that worked with American

industry to assure, in accordance with the Defense Production Act, that the production needs of the military were promptly met. The BDSA, successor to the National Production Authority, has among its employees and executive reservists the wealth of experience based upon service in the NPA and, in many cases, upon service in the War Production Board of World War II in addition. The Secretary of Commerce, Assistant Secretary for Domestic Affairs (to whose area of jurisdiction the BDSA is assigned), the Assistant Secretary for Administration, and the departmental staff offices, all cooperate closely with the Administrator of BDSA to assure that program and administrative plans for the emergency production function will maintain pace with mobilization concepts and requirements as they are developed by the Office of Civil and Defense Mobilization and the Department of Defense. Departmental and BDSA officials participate actively in various interagency policy-forming committees on mobilization problems.

3. *Planning for emergency service activities.*—The major transportation and production planning activities of the Department are outlined in the appended reports of the Civil Aeronautics Administration, Defense Air Transportation Administration, Bureau of Public Roads, Maritime Administration, Business and Defense Services Administration, and the Office of Area Development. The activities of these agencies under the Defense Production Act were included in the Seventh Annual Report of the Joint Committee on Defense Production. Attention is now called to the mobilization activities of the following additional Commerce agencies which do not derive directly from the Defense Production Act, but which are of importance in the mobilization plans of the Department: Weather Bureau, Coast and Geodetic Survey, Bureau of the Census, Office of Business Economics, Patent Office, and National Bureau of Standards.

For the most part, the mobilization programs of this additional group of agencies consist of plans for specialized services to be provided in furtherance of the programs of other agencies, or of plans to assure the continuity of their own essential functions. Some activities in this group are the result of delegations from the Office of Civil and Defense Mobilization. The Department is particularly interested in all plans of its agencies that relate to a transition from peacetime to an emergency situation. It expects during the coming year to encourage acceleration of planning for reassignment of its personnel and resources, in order that the Department would be able to make the most effective contribution in the event of a mobilization effort.

In summary, it will be observed from the reports of the individual agencies that there is a great deal more consciousness of the emergency measures that must be accepted as an integral part of normal activities. Many steps are now being taken seriously which a few years ago were either disregarded entirely or given only lipservice. These steps are still only a beginning of the effort that has yet to be made if we are to rise to the dangers of the nuclear age.

PART II. MOBILIZATION ACTIVITIES OF COMMERCE AGENCIES HAVING FUNCTIONS RELATED TO THE DEFENSE PRODUCTION ACT

CIVIL AERONAUTICS ADMINISTRATION

1. MOBILIZATION PROGRAMS CONDUCTED BY THE CIVIL AERONAUTICS ADMINISTRATION

(*a*) *Military air defense support.*—The principal mobilization program of the CAA is directed toward insuring the continuous operation during a war or national emergency of the civil-military system of air traffic control, aeronautical communications, and aids to air navigation. This program involves the various measures necessary to insure continuity of CAA operations throughout the United States, the Territories, the Commonwealth of Puerto Rico, and United States possessions. It derives from the responsibilities of the Secretary of Commerce and the Administrator of Civil Aeronautics pursuant to the Civil Aeronautics Act of 1938, as amended.

(*b*) *Priorities and allocations.*—Two major civil aviation priorities and allocations programs are conducted by the CAA under authority of the Defense Production Act of 1950, as amended. These programs relate to priorities and allocation of controlled materials needed to support the development, manufacture, and maintenance of (1) air-carrier aircraft, and (*b*) the Federal airways and supporting units system of air navigation facilities. The CAA also participates in the administration of transportation orders T–1 and T–2, pursuant to the Defense Production Act of 1950, as amended.

(*c*) *Continuity of Government.*—This program includes the CAA's preparations for maintaining adequate executive direction during national emergency and emergency relocation of headquarters organizations pursuant thereto. This program derives primarily from Executive Order 10346, Preparation by Federal Agencies of Civil Defense Emergency Plans.

2. AUTHORITY FOR PROGRAMS

(*a*) *Military air defense support.*—This program is authorized and directed by the Civil Aeronautics Act of 1938, as amended, especially titles III and XII thereof. Basic authority is vested in the Secretary of Commerce by Reorganization Plan No. 5 of 1950 and delegated to the Administrator of Civil Aeronautics by Department Order 86.

NOTE.—Authorities so vested in the Secretary of Commerce and the Administrator of Civil Aeronautics were reassigned to the Administrator of the Federal Aviation Agency by the Federal Aviation Act of 1958 (Public Law 85–726 of August 23, 1958). During the period covered by this report the mobilization activities of the CAA were carried out under the authorities cited herein.

Section 302 of the Civil Aeronautics Act of 1938, as amended, provides among other things that the Administrator (1) acquire, establish, and improve air navigation facilities wherever necessary; (2) operate and maintain such air navigation facilities; and (3) provide necessary facilities and personnel for the regulation and protection of air traffic. In exercising this responsibility, the Administrator is directed to give full consideration to the requirements of national defense. Section 1203 of the act authorizes the security control of air traffic in the interest of national security.

In accordance with these statutory directives, agreements have been reached between the Department of Commerce and the Department of Defense involving services now performed by the CAA in support of the air defense of the Nation and other extraordinary services CAA is required to perform during a national emergency. Some examples of these agreements are—

Plan for security control of air traffic and electromagnetic radiations during an air defense emergency (SCATER), approved by the Secretary of Defense and the Secretary of Commerce on May 7, 1957;

Agreement relating to joint use of certain facilities by the Department of Commerce and the Department of Defense, approved for the Department of Commerce by the Honorable Sinclair Weeks and for the Department of Defense by the Honorable Donald A. Quarles on January 9, 1958;

Agreement for fighter interceptor operations, executed by the Commander in Chief, Continental Air Defense Command (CONAD) and the Administrator, Civil Aeronautics Administration, effective December 1, 1955;

Memorandum of understanding between the Continental Air Defense Command and the Civil Aeronautics Administration, executed by the Commander in Chief, CONAD, and the Administrator, CAA, on July 21, 1957; and

Memorandum of understanding regarding operation of CAA and United States Navy approach control and radar facilities within the continental limits of the United States, executed by the Deputy Chief of Naval Operations (Air) and the Administrator, CAA, on March 28, 1958.

(*b*) *Priorities and allocations.*—The CAA priorities and allocations functions are derived from the Defense Production Act of 1950, as amended; Executive Orders 10219, as modified, and 10480; and Defense Mobilization Order VII-5. They are administered under Department (of Commerce) Order No. 86, as amended; and Business and Defense Services Administration Delegation 6 and its related policy memorandum.

(*c*) *Continuity of government.*—CAA authorities and responsibilities for the maintenance of executive direction during national emergency are derived from the Civil Aeronautics Act of 1938, as amended (see (*a*), above) and Executive Order 10346 (50 App. U. S. C. 2292).

3. SUMMARY OF PROGRAMS

(*a*) *Military air-defense support.*—As proprietor of the common civil-military system of air-traffic control, aeronautical communications, and aids to air navigation, the Civil Aeronautics Administration has the basic mobilization problem of insuring the maximum possible continuity of its operations in support of the Nation's air defense efforts during an emergency and postattack civil-military survival operations. This involves direct military support to the Air Defense

Command, the Strategic Air Command, the Tactical Air Command, the Military Air Transport Service, and the air arms of the United States Navy and the United States Army.

By virtue of existing agreements between the Department of Commerce and the Department of Defense, the Civil Aeronautics Administration is committed to performing continuously throughout the preemergency, attack, and postattack period a variety of services that include, among others, the following specifics:

Full operation of the Federal airways system at maximum effectiveness, particularly air-traffic control, communications, and air-navigation facilities;

Expeditious and effective execution of the plans for security control of air traffic;

Full aircraft movement information service (AMIS) from CAA air-traffic-control facilities to Air Defense Command facilities;

Expeditious air-traffic control service to active air-defense missions and fighter-interceptor aircraft;

Effective joint operation and maintenance of civil-military radar facilities;

Expeditious transmission of reports on vital intelligence sightings to appropriate military headquarters;

Positive and expeditious identification of in-bound aircraft over oceanic areas;

Operation of the central altitude reservation facility (CARF) to coordinate airspace reservations;

Operation of military radar approach control facilities;

Providing ground-to-air communications services for military flights;

Participation in provision of radar weather advisory service by air defense facilities;

Transmitting aircraft movement messages for all military flights originating at other than military bases; and

Providing access to and use of CAA-teletypewriter systems to military users.

Operational plans for these various military air defense support activities were kept in a high degree of readiness throughout fiscal year 1958. They were given continuing attention; they were periodically tested. When required by changing circumstances, the operational plans are modified and revised in collaboration with the Department of Defense.

To insure operational continuity in a post-attack period characterized by widespread radioactive fallout requires the CAA to establish a radiological monitoring capability adequate for the detection and measurement of radiological hazards at all places where essential CAA operations are conducted. Accordingly, the Civil Aeronautics Administration during fiscal year 1958 initiated a program for the development of radiological monitoring capability and obtained from the Federal Civil Defense Administration a supply of portable radiological monitoring instruments sufficient to provide radiological data for CAA personnel in accordance with general civilian requirements.

Since CAA personnel must, however, remain on duty and in operation to the maximum possible extent during an emergency (so as to fulfill commitments to the Department of Defense as described above) radiological defense capability of a higher order is required; planning toward that end was begun in fiscal year 1958. The results of such planning are reflected in the construction specifications of buildings designed for certain operations of the agency vital to the national security.

(*b*) *Priorities and allocations.*—CAA activities with respect to priorities and allocations during fiscal year 1958 were primarily of three types—those relating to air-carrier aircraft requirements, the Federal airways and supporting-units requirements, and miscellaneous priorities and materials.

(1) Air-carrier aircraft: The first part of this program deals with the establishing of production schedules to assure priority support for the manufacture of civil air-carrier aircraft; the second part deals with priorities for maintenance, repair, and operating supplies and equipment for air-carrier aircraft.

CAA, acting as a coordinating agency for the Air Coordinating Committee, prepared and submitted quarterly requirements to the Aircraft Claimant Subcommittee of ACC for new civil air-carrier type aircraft for both United States and friendly foreign airlines. ACC considered these schedules of aircraft units and following approval, forwarded them to the Department of Defense Aircraft Production Resources Agency for use as a basis for approving the manufacturers' requests for priority authority and controlled materials allotments to

implement the scheduled production. In addition, the approved programs were forwarded to the Office of Civil and Defense Mobilization for its information.

With respect to the maintenance, repair, and operating supplies for aircraft operated by both domestic and friendly foreign airlines, CAA, in exercising its allotting-agency responsibilities (1) presented quarterly requirements for allotments of controlled materials to the Department of Defense; and (2) obtained ratings which provided priority assistance for air carriers equal to that made available to military elements.

In administering the air-carrier MRO program, CAA transferred allotments and rating authority to designated agents of domestic airlines, and to the Bureau of Foreign Commerce for airlines coming under its cognizance; and applied ratings to purchase orders of airlines in countries coming under cognizance of the International Cooperation Administration.

Supplementing the air-carrier MRO program, CAA carried on an emergency repair parts program to assist domestic airlines when threatened with grounding of aircraft because of lack of parts. Through agreement between the United States Air Force and CAA, the Air Force, upon certification of an emergency by CAA, diverted from its stocks parts needed to prevent interruption of United States airline service.

(2) Federal airways and supporting units: CAA administered the collection of requirements for the development, establishment, and maintenance of the Federal airways system, including requirements of the CAA itself and those of the Airways Modernization Board and Aeronautical Radio, Inc.; it presented such requirements to the Department of Defense for issuance of allocations. CAA provided for control of allotments, including accounting control, and the issuance of priority authority for the Federal airways and supporting units program.

(3) Miscellaneous priorities and materials: Under the defense materials system, the manufacture and maintenance of noncarrier aircraft do not qualify for priorities and allocations. However, in keeping with ACC policy, CAA collected requirements in terms of aircraft units needed for defense-supporting civil activities such as executive, agricultural, and industrial flying. These requirements were incorporated in quarterly production programs and submitted to ACC for approval. The approved noncarrier aircraft programs were forwarded by ACC to the Department of Defense Aircraft Production Resources Agency for information as to available productive capacity and for integration with the civil air carrier and military programs to form the complete United States aircraft-production program. The approved programs were also forwarded to the Office of Civil and Defense Mobilization for its information.

4. EFFECTIVENESS OF THE PROGRAMS

(*a*) *Military air-defense support.*—The Civil Aeronautics Administration is in a satisfactory state of readiness with respect to the operational plans for certain specific emergency actions, such as the security control of air traffic and the execution of CAA's portion of CONELRAD. On these matters the Administrator of Civil Aeronautics has clear authority and the necessary authorizations and resources to take required actions. Since there are, however, a number of unresolved problems that prevent the CAA from attaining an adequate state of emergency readiness, it would be fallacious to assume that, operating under other than peacetime conditions, it could satisfactorily fulfill all of its air defense support responsibilities. These unresolved problems involve primarily the trained manpower required for effective wartime operations and the nuclear defense capability to make uninterrupted operations possible in a post-attack period.

(*b*) *Priorities and allocations.*—The system is functioning adequately for current needs and could be readily adapted to more intensive use under emergency conditions.

(1) Air-carrier aircraft: The Air Coordinating Committee has approved the production of 625 air-carrier aircraft during the period July 1, 1958, through December 31, 1960. With respect to maintenance, repair, and operating supplies for air-carrier aircraft, an adequate allotment of controlled materials to meet the needs of participating domestic and friendly foreign carriers was made, and DO ratings to the extent of approximately $36 million each quarter were issued for this purpose.

(2) Federal airways and supporting units: Allocations of controlled materials were received from the Department of Defense and were made available

for the development, establishment, and maintenance of air-navigation facilities in amounts adequate to carry on the expansion program of the CAA. The use of military allotment symbols and priority ratings for equipment and supplies permitted continuation of this program without serious delay.

(3) Miscellaneous requirements: As a result of presentation by the CAA a noncarrier aircraft-production program was approved by ACC which formed the basis for the scheduled manufacture of 8,431 airplanes in the calendar year 1959, and 8,373 in 1960, thus contributing to the stability of aircraft-production output which is so important to the continuation of essential noncarrier civil aviation.

(c) *Continuity of Government.*—The Civil Aeronautics Administration, like other constituents of the Department of Commerce and of the executive branch, has developed emergency relocation plans, which provide for the relocation of its national and regional headquarters in the event of an attack on the United States or its imminence. These plans were evaluated during Operation Alert 1958 with respect to an assumed situation furnished by the Office of Defense Mobilization and the Federal Civil Defense Administration. As a result of that exercise and other analyses it is clear that the basic accomplishments of this program must be supplemented by additional specific preparations if they are to provide adequately for uninterrupted executive direction during a serious national emergency.

The national headquarters and the regional offices of the Civil Aeronautics Administration are all located in attractive target areas. In the continental United States, the agency has negotiated agreements for the use of non-Federal facilities for emergency relocation headquarters. It has been impossible, however, within the resources available to the agency, to make the necessary adaptations and to establish the essential communications capability that would make the use of the designated relocation sites effective.

Moreover, the regional offices in Alaska and Hawaii are unable to make conventional arrangements for emergency relocation sites, such as are made by the United States Government agencies generally within the United States. Appropriate non-Federal facilities are scarce and, where they do exist, they are located in areas just as vulnerable to attack as the regular headquarters. Consequently, extraordinary preparations would be required to insure continuity of executive direction for the Civil Aeronautics Administration in both Alaska and Hawaii.

5. CURRENT NEED FOR THE PROGRAMS

(a) *Military air defense support.*—The common civil-military system of air traffic control, aeronautical communications, and aids to air navigation is an essential element of the national defense, as well as a key factor in the civilian economy. The Department of Defense, the Airways Modernization Board, and the Department of Commerce are engaged in a tremendous effort to develop a compatible environment in which all aircraft, regardless of mission, can be safely and efficiently accommodated. A vital element on which the successful execution of this program depends is the assurance of uninterrupted availability and responsiveness of the facilities and personnel of the common system in the event of war or national emergency.

(b) *Priorities and allocations.*—In the light of existing conditions, the current programs operated on a standby basis, must be continued and kept adaptable to more extensive application.

(1) Air-carrier aircraft: During the Korean emergency, the Department of Defense, the National Production Authority, and the Defense Production Administration recognized that the air-carrier aircraft program was so closely connected with the defense effort that the use of military allotment symbols and priority ratings was authorized in its support.

This recognition was continued when the defense materials system became effective; it was reaffirmed by the Office of Defense Mobilization in January 1956. The defense-supporting aspects continue to be as important as when the decision was made to give the program priority support. Such recognition must be afforded the program as long as controls on defense production are maintained.

(2) Federal airways and supporting units: The air-navigation facilities installed by the CAA require the use of high-precision electronic equipment and other related materials. When the defense materials system became effective on July 1, 1953, it was considered by the CAA, and agencies of higher authority, that, due to its close connection with the defense, this program should continue to receive priority and allocations support equal to that accorded military pro-

grams. This support was reaffirmed by the Office of Defense Mobilization on January 10, 1956. The current expansion of the Federal Airways System, and recent legislation relating to civil aviation, have emphasized further the soundness of this decision. As long as controls applicable to defense production are continued, the program must be afforded equal status with like military programs.

(3) Miscellaneous: CAA must continue to prepare noncarrier aircraft requirements data for submission to the Department of Defense and the Office of Civil and Defense Mobilization so that mobilization planning will take into account this important segment of the aircraft industry. In addition, if any critical shortage should affect the production of such aircraft, the CAA will present claims for priority assistance where essentiality to the defense effort is shown.

(*c*) *Continuity of Government.*—In view of the Civil Aeronautics Administration's unique role in supporting the air defense of the Nation, it must continue to improve its preparations for maintaining effective executive direction over its field operations. It must also be recognized that air transportation would be a critical factor in the Nation's survival after a nuclear attack, since surface transportation systems would be much more severely disrupted by the physical and radiological effects of an attack than air transportation systems.

In an immediate postattack period, when the radiological hazard would be greatest and most widespread, it would be critically important to maintain maximum effectiveness in facilitating the flow of civil air traffic required for relief and rescue missions that do not interfere with higher priority military traffic. The expeditious and timely movement of such basic essentials as blood, food, and water may determine the survival of large numbers of our citizens.

6. RELATION TO SMALL BUSINESS

This relationship is of particular concern in connection with CAA's priorities and allocations functions. Rated orders issued under the air carrier MRO program and the Federal airways and supporting units programs were well distributed among both large- and small-business concerns to whom there was accorded equal priority and allocations support in accordance with the provisions of the defense materials system.

7. MAJOR PROBLEMS IN CAA MOBILIZATION PROGRAMS

The principal factors involved in attaining an adequate state of emergency readiness for the Civil Aeronautics Administration concern the utilization of the agency's facilities and personnel during a national emergency and the extent to which it is feasible to undertake the necessary preparations for coping with the foreseeable effects of a possible attack on the United States.

The CAA's basic wartime manpower problem is essentially that of having an adequately trained force-in-being that can be relied to stay on the job and respond effectively to vital wartime requirements. Considering the speed and destructiveness of attack in warfare today, it is axiomatic that the agency must be prepared to act effectively, at once, and without interruption if attack comes. The depletion of CAA's trained manpower as a result of military mobilization, e. g., through the activation of reservists and National Guard units and the operation of selective service, would seriously impair CAA's capability for performing essential functions in support of the natonal defense. The soluton to this problem is closely related to the question of the agency's wartime organization location. The Federal Aviation Act of 1958 directs the Administrator of the Federal Aviation Agency to undertake a study of this problem and to make appropriate recommendations on this matter to the Congress on or before January 1, 1960.

To insure that CAA operating under wartime conditions can actually fulfill its civil-military responsibilities is the most serious emergency readiness problem of the agency. Specific actions not yet authorized would be necessary to insure continuing capability under conditions requiring the evacuation of CAA headquarters or the protection of operating personnel at fixed facilities throughout the United States and elsewhere. Although the CAA is reasonably well prepared to carry out many of its functions in an emergency, its preparations for coping with an attack do not now include arrangements for an adequate communications system for emergency use; reduction of vulnerability of existing land-line communications; stockpiling of food, medical supplies, and other items required for emergency use; providing radiological protection in existing buildings used for essential operations; etc.

A second aspect of the Civil Aeronautics Administration's mobilization planning that requires clarification relates to the effective wartime utilization of non-Federal civil aviation facilities. The Administrator of Civil Aeronautics does not now have adequate authority to perform the actions that would be necessary in a postattack period to insure the maximum utilization of the Nation's aviation resources for defensive and survival actions. Consistent with his normal statutory responsibilities in peacetime, it appears that the Administrator should be authorized to provide for (1) the expeditious reconstruction or rehabilitation of essential civil airports damaged by enemy attack, (2) the continued operation, maintenance, and emergency repair of essential civil airports that remain operable after attack, (3) the establishment of additional or alternate essential airport facilities to replace those destroyed, and (4) the security control of the usable airport facilities. The Administrator of Civil Aeronautics does not now have this authority.

An adequately functioning air transport system in a postattack period would also require maximum utilization of repair stations and other civil aviation facilities required for the support of aircraft movements. The Civil Aeronautics Administration's role with respect to the emergency readiness of these elements of the national transportation complex requires clarification.

CAA experience indicates no serious problems in carrying out priorities and allocations functions delegated to the agency in connection with controlled materials programs.

8. CHANGES IN MOBILIZATION PLANNING AND STOCKPILING

The Civil Aeronautics Administration continued to improve its mobilization planning during fiscal year 1958, but this involved no major changes in methods or procedures for dealing with an attack or other emergencies.

A program for developing radiological monitoring capability was initiated during fiscal year 1958 in connection with the agency's responsibilities for air defense support. Agency policies for dispersal and protective construction of vital facilities, consistent with those of the Office of Civil and Defense Mobilization and the Department of Defense, were developed and applied to construction of new buildings.

Throughout the year, CAA continued to submit to OCDM requested current requirements of titanium and titanium alloys for the air carrier MRO program. CAA also continued to work with the Business and Defense Services Administration and the Electronics Production Resources Agency in mobilization-planning studies requested by OCDM relating to mobilization requirements versus productive capacity of selected electronic components.

9. PROGRESS ACHIEVED IN CONTINUITY AND DISPERSAL

(*a*) *Nuclear defense training.*—The Joint Committee on Defense Production pointed out in its seventh annual report that "nuclear and technological developments continue * * * to introduce new dimensions and timing requirements for the defense of the United States." To insure that the Civil Aeronautics Administration's basic planning and programing give cognizance to the new and changing defense requirements in the nuclear age, the agency arranged through the cooperation of the Department of the Air Force and the Department of the Army for the training of 26 nuclear defense officers for the CAA. This training, along with the development of radiological monitoring capability in collaboration with the Federal Civil Defense Administration, has contributed greatly to improving CAA's preparations for insuring the continuity of its essential operations.

(*b*) *Dispersal of facilities.*—The Civil Aeronautics Administration is charged by law to provide and operate continuously a safe and efficient air traffic control system for the Nation's civil and military air traffic. In carrying out this basic statutory responsibility, the CAA has underway a program for constructing new buildings to house its Air Route Traffic Control Centers, which are the principal control points of the Federal Airways System. The new buildings are urgently required to incorporate new techniques and equipments essential to the provision of adequate air traffic control service.

The Civil Aeronautics Administration, in conformity with Defense Mobilization Order I–19, is obtaining the advice of the Office of Area Development (Department of Commerce) and the Department of Defense with respect to the vulnerability of the proposed location for each of these new center buildings.

CAA is evaluating each case on its merits, with a view to conforming to the maximum possible extent with the provisions of DMOI–19, which states:

"It is the policy of the United States to encourage and, when appropriate, to require that new facilities and major expansions of existing facilities important to national security be located insofar as practicable, so as to reduce the risk of damage in the event of attack * * *"

The Administrator of Civil Aeronautics has estabilshed the following policy for the construction of the new Air Route Traffic Control Center building:

(1) The new centers will be located in general, in the vicinity of the larger traffic hubs which generate the greater part of the center workload in the respective control areas; as location elsewhere introduces operational and cost disadvantages seriously affecting the basic ATC function of the agency.

(2) Within the vicinity of the larger traffic hubs, the new centers will be located in dispersed locations, that is, outside of the zones of probable damage of critical target areas, wherever it is practicable to do so. However, it is recognized that in some instances it will not be practicable to locate the centers in dispersed locations because of the doubtful availability of private capital or the excessive costs of essential communications and utility services.

(3) Protection of personal on duty against the hazard of radioactive fallout will be provided in the construction of the control and equipment wing of the building.

(4) Protective measures other than dispersion and protection construction for center buildings will be pursued further, such as alternate circuitry, definite plans for transfer of control to undamaged centers, and the practicability of standby centers of skeletal capacity at other CAA facilities.

The location of vital facilities at sufficient distance from the probable point of detonation for a nuclear weapon is by far the best countermeasure for dealing with the blast and thermal effects of nuclear weapons. The relocation of the centers away from the probable point of detonation, as contemplated in Defense Mobilization Order I–19, serves not only to protect them from blast and thermal effects; it also protects them against the most intense and complex radiological hazards arising from initial radiation characteristically present in the physically damaged area.

Dispersal at distances of 20 to 30 miles, however, provides no significant protection against the residual radiation hazards of radioactive fallout, which covers much larger areas and may constitute a serious lingering hazard to personnel, thus preventing, hampering, or delaying vital operations at remote locations that escape physical damage. Radiologically protective construction, therefore, becomes a basic element in the planning of dispersed essential facilities.

10. SUMMARY OF STANDBY PROGRAMS FOR FUTURE EMERGENCY

The Civil Aeronautics Administration's mobilization programs are in part currently operational and in part on a standby basis. The successful operation of the civil-military system of air-traffic control, aeronautical communications, and aids to air navigation requires that it be able to make the transition from peacetime to wartime operations without faltering or loss of efficiency. Accordingly the operational aspects of air defense supporting plans are given continuous attention and periodically tested. The conditions of modern warfare dictate a volume and type of peacetime military flying, training, and surveillance activities that place many of CAA's wartime activities on a current operational basis.

CAA's priorities and allocations functions are primarily on a standby basis. Administration of the air-carrier aircraft and the Federal airways and supporting-units programs, under the standby defense materials system, will be continued in accordance with the regulations and in the light of existing conditions. Likewise, the preparation of noncarrier aircraft production schedules will be continued. The procedures and necessary standby organization will be maintained as long as controls exist so that, in the event of partial or full mobilization, expansion of this activity may take place with a minimum of delay.

11. MOBILIZATION ORGANIZATION

There were no changes in the organization of CAA's mobilization activities during fiscal year 1958. The Office of the Administrator exercises general responsibility for emergency readiness planning through the administrative

coordination officer. Functional and operational mobilization activities are carried out through the program offices, particularly the Office of Air Traffic Control, the Office of Air Navigation Facilities, the Office of Airports, and the Office of Flight Operations and Airworthiness. Administration of the priorities and allocations functions is the responsibility of the Defense Requirements Staff of the General Services Office. Air Defense support is coordinated by the Military Liaison Branch of the Office of Air Traffic Control.

12. AVAILABILITY OF FUNDS FOR DEFENSE NEEDS

No funds have been appropriated specifically for insuring the continuity of CAA's essential functions in wartime or various phases of the agency's emergency readiness programs. Although funds appropriated for the operation of the common system of air-traffic control, aeronautical communications and aids to air navigation represent a considerable contribution to the defensive capabilities of the Nation, no funds have been made available for specific mobilization requirements, e. g., insuring uninterrupted communications capability; radiological protection of essential operating personnel in existing buildings; adaptation of emergency relocation sites required for effective continuity of executive direction; stockpiling of equipments, supplies, and other materials required for emergency operations; and other similar deficiencies in emergency readiness preparations.

13. FRAMEWORK OF MOBILIZATION PROGRAMS

The Civil Aeronautics Administration's emergency readiness programs during fiscal year 1958 were consistent with the mobilization plans of the Office of Civil and Defense Mobilization and the air-defense plans of the Department of Defense, although their basic requirements are derivative from the Civil Aeronautics Act, as amended, which directs the Administrator of Civil Aeronautics to give full consideration to the requirements of national defense. The general objective of the emergency readiness program is to insure the continuity of CAA's essential functions throughout the United States and its Territories and possessions in the event of a national emergency.

14. ACTIONS TAKEN ON RECOMMENDATIONS OF THE JOINT COMMITTEE ON DEFENSE PRODUCTION

The Joint Committee on Defense Production made no recommendations in its seventh annual report that related to the mobilization responsibilities of the Civil Aeronautics Administration.

15. OTHER PERTINENT INFORMATION

In general the Civil Aeronautics Administration believes that, in the event of a war opening with the massive exchange of nuclear weapons, survival will be accomplished primarily through the most effective use of the resources and facilities then available. This places a major emphasis on preemergency preparations and stockpiling to an extent not yet provided for. The radiological hazards of the postattack environment dictate that an adequate radiological defense capability be provided now.

CAA mobilization activities during fiscal year 1958, to the extent that resources were available for this purpose, were directed toward insuring continuity of essential wartime functions within such an environment and have contributed materially toward the achievement of the objectives set forth in the declaration of policy in the Defense Production Act of 1950, as amended.

DEFENSE AIR TRANSPORTATION ADMINISTRATION PROGRAM AND AUTHORITY

During the past year, DATA's program has been to further perfect the readiness of civil air transportation facilities for immediate conversion to the most effective wartime operation. DATA is maintaining a standby allocation of four-engine, long-range aircraft to a civil reserve air fleet, periodically geared into current Department of Defense plans. This standby allocation is necessary for effective operational and logistical mobilization planning.

From section 101 of the Defense Production Act, Executive Orders 10480 and 10219, and Commerce Department Order No. 137, priorities and allocation au-

thorities with regard to air-transportation facilities are delegated to the Secretary of Commerce, and redelegated to DATA. DATA's duties include:

1. Assemble and analyze data on the requirements of civil air transportation and of the Department of Defense for aircraft of the types used by civil air carriers.
2. Formulate plans and programs and initial action to meet these requirements, including the transfer or assignment of aircraft of civil air carriers to the Department of Defense when required for such needs of the Armed Forces as are approved by the Director of OCDM.
3. Consult with the Chairman of the CAB on the redistribution of remaining aircraft among civil air carriers to assure the maintenance of essential civil routes and services.
4. Schedule the movement of traffic and administer priorities for civil air carrier transportation.
5. Recommend to OCDM on loans to private enterprise for expansion of air-transportation facilities where such expansion is essential for the national defense.

Two other DATA activities not under the Defense Production Act but closely related to national defense are: (1) accelerated tax amortization of air-transport facilities under section 124A of the Internal Revenue Code; and (2) aviation war-risk insurance under Public Law 47, 82d Congress.

ALLOCATION OF AIRCRAFT

The current allocation of aircraft to military support is 309 four-engine aircraft, by registration number, for the civil reserve air fleet for fiscal 1959, 281 in 1960 and 198 in 1961. With larger and more modern aircraft being included in these allocations, the increase in airlift capacity over the 1955 allocation is approximately 30 percent. The capability of the CRAF fleet for each of these years amounts to about one-third of the total long-range four-engine commercial airline airlift. The relative contributions of air carriers was made after reviewing the recomendations of DATA's Allocations Advisory Committee on which all CRAF contributors are represented.

CIVIL RESERVE AIR FLEET

The CRAF Logistics Working Group is currently revising operational and logistics support plans for the CRAF for 1960 and 1961. Procedures have been developed for maintaining these plans on a continuing basis, adjusting them for changes in war plans, allocations of aircraft, and other factors.

The group draws for expert technical advice upon over 400 individuals in the air-transportation industry who have security clearance for this project, as well as representatives from Air Force Headquarters, Air Materiel Command, Military Air Transport Service, Civil Aeronautics Administration, Aeronautical Radio, Inc., Airlines Personnel Relations Conference, and DATA.

Agreement has been reached between carrier representatives and the Air Force on the basic plans for standby airlift contracts whereby the CRAF can be employed when needed, without loss of efficiency, or financial difficulties. DATA participates in the working group in this phase of the CRAF program. Following an 18-month review by Headquarters USAF of a CRAF standby contract draft and a meeting of CRAF airline presidents and the Secretary of the Air Force, the CRAF Standby Contract Drafting Committee has been engaged in a final redrafting of this contract. It is expected that this document will be executed in the near future.

In order to continue with current CRAF planning, and in order to operate the CRAF immediately and efficiently upon the outbreak of war, it is necessary that operations boards, composed basically of airline representatives, be organized. A DATA representative is chairman of the operations boards agreement drafting committee. During the year a Department of Justice opinion has been obtained which deals with the antitrust aspects of the operations boards agreement draft. Recently this agreement was executed by the Secretary of the Air Force and all CRAF carriers and thereafter submitted to the Civil Aeronautics Board for the latter's review and approval.

WAR AIR SERVICE PATTERN

Authority has been delegated to the Chairman of the Civil Aeronautics Board to reallocate aircraft between civil operators on a war air service pattern for

the most effective use of air transportation for national defense purposes. The Chairman of the CAB created an industry advisory committee with task groups to work on the various problems in this field. Three task groups have been established for the purpose of developing detailed plans for strategic action to implement this phase of air transport operation under mobilization.

AIR PRIORITIES

Under a written agreement between the Secretaries of Commerce and Defense, there is an Air Priorities Board, with the Administrator of DATA representing the Secretary of Commerce. This Board has been created to determine policies required for the operation of a single worldwide air priorities system controlling traffic on United States military and civil transport-type aircraft in the event of war.

The standby organization which would administer the policies of the Air Priorities Board has not yet been formalized.

An interim organization, with airline experts designated by name and phone number, has been established among domestic airlines to administer the air priorities system pending the creation of a standby Department of Defense organization, in order that under emergency conditions the most essential and urgent traffic, military and civil, and civil defense, will move first.

GENERAL AVIATION

With the concurrence and cooperation of the owners, allocation of approximately 800 multiengine transport-type, business and privately owned aircraft has been made by DATA to meet civil defense requirements in the initial stages of an emergency. This national emergency defense airlift (NEDA) plan has been worked out in detail with the Federal Civil Defense Administration and will be implemented through State aviation directors and airport managers of major airline stations to assure the most effective utilization of this fleet under mobilization. Coordination through OCDM is expected to strengthen the plan and to provide for increased readiness to meet emergency conditions.

MANPOWER

The manpower technical advisory groups of both the Atlantic and Pacific committees of the CRAF Logistics Working Group have continued their work in support of the CRAF operation and have revised the manpower allocations among the carriers to bring them in consonance with current and projected aircraft allocations. The Border Clearance Group, of which a DATA representative is vice chairman, has completed its task of preparing a supplement to the MATS Traffic Manual covering border-clearance procedures for CRAF personel as related to the Departments of Agriculture, Public Health, Immigration, and State.

Work was continued throughout the past year with the Department of Defense and the air carrier industry toward establishing a policy regarding the screening of airline personnel who have Ready Reserve status with the military forces. A firm policy has now been agreed upon as documented in a memorandum from the Secretary of Defense dated July 18, 1958.

TAX AMORTIZATION

Although there is at the present time no open expansion goal to cover tax amortization for aircraft, DATA is prepared to carry out its functions in recommending to OCDM such rapid writeoff together with the issuance of defense loans.

AVIATION WAR-RISK INSURANCE

In 1957 Congress passed legislation extending the provisions for aviation war-risk insurance for an additional 5 years. The 85th Congress enacted enabling legislation for this program and recently binder insurance coverage has been issued to certain airlines. This coverage relates to aircraft crews, passengers, cargo, and the carriers' third-party liability.

NATO PLANNING

The Administrator of DATA serves as the United States representative on the Civil Aviation Planning Committee (CAPC) of the North Atlantic Treaty Organization (NATO). A DATA staff member is United States representative on the Planning and Logistics Group of CAPC.

EXECUTIVE RESERVE PROGRAM

Since DATA has a major responsibility for air transportation under mobilization, plans have been initiated for recruitment and training of an Executive Reserve Corps to be available for service on a full-time basis under mobilization conditions. Twenty-seven highly qualified executive reservists were designated during the past year, several of whom participated in the Operation Alert 1958 exercise at the relocation center. Representatives were chosen from a wide range of categories, including air carrier, agricultural flying, general aviation, labor, legal, insurance, and the educational field. This program will be expanded and will include periodic indoctrination in all of DATA's program throughout the year.

BUREAU OF PUBLIC ROADS

1. Mobilization programs conducted by your department

Integration of the needs of national defense with the national highway program, continuity of the Bureau of Public Roads and the State highway departments in event of emergency including organization and procedures to enable the effective performance of assigned wartime missions.

The Bureau of Public Roads is the agency which discharges Federal responsibilities for highway construction, preservation, and operation (and regulation when authorized), including preparation for the continuity of these functions in the event of emergency. In an emergency it has the dual responsibility, either directly, through the respective State highway organizations, or otherwise, to maintain in operable condition the entire available highway network of the Nation and routes of strategic importance elsewhere (and to regulate highway traffic as necessary and when authorized to expedite the movement of essential civilian and military traffic). These responsibilities may likewise be exercised in areas under military jurisdiction upon agreement between the military commander and the Bureau of Public Roads.

2. The authority from which your department derives its powers for such programs

The Federal Highway Act of 1921 and subsequent highway legislation now codified and enacted into positive law as title 23, United States Code; Executive Orders 10219, 10346, 10480; Defense Mobilization Orders 1–8, 6–2, 7–5; delegations from the Office of Defense Mobilization and the Federal Civil Defense Administration (now merged in the Office of Civil and Defense Mobilization), which delegations are currently under review and revision.

3. A summary of each program

1. Administration of National System of Interstate and Defense Highways and other Federal-aid highway programs including appropriate treatment of national defense aspects.
2. Administration of the defense access, replacement and maneuver road program to meet special highway needs of defense agencies beyond those which can be met by normal highway programs.
3. Administration of foreign highway programs.
4. Construction of highways in the Federal domain.
5. Research activities in the highway field, including those having special defense significance.
6. Direction and coordination of State highway departments' efforts to attain a state of readiness to meet an emergency.
7. Administration of authorized programs of stockpiling of highway construction and maintenance materials, equipment, and supplies.
8. Exercise of Federal leadership for cooperative action by highway agencies in effecting restoration and reconstruction of damaged highway facilities in a national emergency.
9. Stimulation of adequate planning and development of operating capabilities by all highway agencies to meet emergencies, including those activities necessary for survival and functioning of State highway departments and their personnel.

10. Preparation of plans and procedures for the administration of allocations and priorities functions applicable to highway construction and maintenance materials, equipment and supplies, including for all highway agencies at all levels of government, the claimancy function and the function of establishing priorities within highway allocations.

11. Cooperation with the Office of Civil and Defense Mobilization, DOD, and other Federal agencies on special programs, such as the development of prototype shelters for the protection of the traveling public on highways at the time of enemy attack.

12. Provision for continuity of essential functions under emergency conditions.

13. Development of plans and procedures for the preparation when authorized of an inventory of essential motor vehicles.

14. Development of plans and procedures for the regulation, when authorized, of traffic over highways and allocation of road space to essential users when such road space is restricted by radioactive fallout or otherwise damaged by enemy attack.

15. Cooperation with State highway departments and the Office of Civil and Defense Mobilization in effecting temporary repair and emergency replacement of highways and highway facilities damaged as the result of a major natural disaster.

4. A summary of the effectiveness of the programs

These programs, as a single cohesive approach to the problem of highways and the use thereof in a post-attack period, would be effective in minimizing the impact of enemy attack on the Nation's transportation facilities.

5. A statement on the current need for the programs

In those highway programs which are currently in progress, the incorporation of national defense considerations is a continuing need, as it has been since 1921 or earlier. Those programs which involve planning to meet an emergency growing out of enemy attack are considered to be essential until such time as international relations are no longer characterized by their present state of tension. As noted by the Joint Committee on Defense Production in its seventh annual report: "The big defense preparedness job for the nuclear age still lies ahead."

6. A summary of the programs as related to small business

In the vast majority of highway programs, the actual contracts for construction are awarded by the States to which Federal funds have been allocated. In the awarding of these contracts, the interests of small business are given appropriate consideration.

7. Major problems which now confront your department in carrying out mobilization programs

1. The need for instruction and equipment of State highway personnel to detect radiation hazards in order that they may determine highways open for unrestricted travel, and for the protection of highway workers.

2. The need for a broad program to integrate State highway departments into the entire field of emergency planning as it affects the highway field.

3. The need to develop manuals of standing operating procedures to be applied in event of emergency.

4. The need for adequate, reliable communications facilities between national headquarters and the field, and between field offices in separate locations.

5. The need for reasonably safe, dispersed sites from which offices of the Bureau can operate under normal circumstances as well as in time of emergency, and the need to persuade State highway departments to make comparable arrangements for themselves.

8. Changes in mobilization planning and stockpiling to meet an attack or other emergencies, including a statement of any action taken on the recommendations of the Special Stockpile Advisory Committee (Pettibone Committee)

The Bureau's legislative program for the 86th Congress will contain a proposal to authorize the stockpiling of bridge materials.

9. Progress achieved in the continuity of government, the continuity of production, and the dispersal of industry

In the matter of providing for the continuity of the Bureau of Public Roads, plans and procedures have been fully developed covering delegations of authority

to regional and division offices and succession to positions of command. Plans and procedures have been partially developed covering relocation of offices.

However, the Bureau feels that it cannot report any meaningful accomplishments in this field until it is in a position to make provision for the protection of its personnel. The development and elaborate documentation of mobilization plans, when we cannot be even reasonably sure that key personnel will remain alive to give effect to them, appear quite futile. Until adequately protected offices are established, no real achievement with respect to the continuity of its function can be reported.

As to the continuity of production, this function is not applicable to the duties of the Bureau of Public Roads.

Concerning the dispersal of industry, it should be noted that highway transportation over new and better highways contributes in an important way to the nation's chance for survival by facilitating the dispersal of industry and population. Industry is being attracted to new areas being made increasingly accessible by the National System of Interstate and Defense Highways, to which new and dispersed sites it can now draw workers from greater distances because of the greater ease of travel over the new highways. Industry, becoming so located along the Interstate System, is developing a pattern of dispersal which creates a more difficult and less remunerative target for attacks from the air.

10. Summary of standby programs for any future emergency

See programs enumerated in detail in response to question No. 3, particularly items 7, 8, 10, 11, 13, and 14.

11. Changes in organization during the past year

No significant changes.

12. Availability of funds for defense needs

As part of the normal Federal-aid highway program, funds are adequate for the incorporation of defense requirements.

However, for the vital needs of the Bureau and State highway departments to achieve an adequate state of readiness, available funds are wholly inadequate.

13. A description of the manner in which your mobilization programs fit into a defense plan, and the objectives to be achieved

The mobilization planning of the Bureau of Public Roads is fully coordinated with broad defense plans of the Department of Defense and other agencies including plans developed by the Office of Civil and Defense Mobilization.

The objective of the Bureau is to plan for maximum utilization of facilities available to it and to the State highway departments for the greatest possible utilization of highways for the movement of essential traffic.

14. A statement of action taken as a result of any recommendations of the Joint Committee on Defense Production, including the recommendation contained in the seventh annual report of this committee

The Bureau of Public Roads has not identified any specific recommendations which are directly applicable to it. However, the Bureau's program as herein outlined is proceeding generally in consonance with views and wishes of the joint committee.

15. Such other information as may appear pertinent in summarizing your mobilization activities for the past year

A very important aspect of the Bureau's work is the natural disaster relief work carried out under the Federal-Aid Highway Act and in cooperation with the Office of Civil and Defense Mobilization. This is significant in that comparable action would be necessary under conditions of an emergency resulting from enemy attack.

Federal Maritime Board–Maritime Administration

During this period, the Federal Maritime Board-Maritime Administration continued to devote its resources to the accomplishment of a number of activities, designed to promote the development and maintenance of a strong and balanced merchant marine. The need for such a merchant marine for national defense purposes under current concepts of warfare was reaffirmed during the year by the National Security Council.

The following is a brief summary of these activities, together with other comments as requested:

INTERNATIONAL MOBILIZATION ACTIVITIES

The 10th meeting of the Planning Board for Ocean Shipping (PBOS) of the North Atlantic Treaty Organization (NATO), was held in Washington on April 15-17, 1958. The Maritime Administrator, as United States representative on the Planing Board, served as chairman of the meeting, which was attended by maritime representatives of the NATO governments.

The basic mission of this body is to plan in peacetime for an appropriate shipping organization of a civilian character for the mobilization and allocation of merchant shipping on a worldwide basis in time of war or emergency.

Authority: North Atlantic Treaty Organization.

PRIORITIES ALLOCATIONS PROGRAM

As a claimant agency for ship construction (oceangoing) the Maritime Administration processed priorities and allocations actions under redelegation from the Department of Defense covering 11 ships essential for defense purposes during the year. Of these, 7 ships have now been delivered, leaving 4 ships which will require continued controlled material allocation actions. The priorities and allocations actions were handled under the regulations of the defense material system.

Authority: Defense Production Act of 1950, Public Law 774, 81st Congress; the Merchant Marine Act, 1936, as amended; Executive Order 10480, as amended; Executive Defense Mobilization Order VII-7, dated March 6, 1957.

ALLOCATION OF SHIP CONSTRUCTION CONTRACTS

During the year the Federal Maritime Board, acting in accordance with the provisions of section 502 (f) of the Merchant Marine Act, 1936, as amended by Public Law 805, 84th Congress, allocated construction contracts for six ships to shipyards located in strategic parts of the United States. This law permits, subject to the approval of the President, the allocation of ship construction contracts, not necessarily to the lowest bidder, in order to assure dispersal of work and a fair regional distribution of contracts, in the interest of maintaining shipyards and skilled shipyard labor in the various shipbuilding centers of the United States. It is designed to provide a more sound mobilization base for shipbuilding.

Authority: Public law 805, 84th Congress, amending section 502 (f) of the Merchant Marine Act, 1936, as amended.

SHIPBUILDING PROGRAMS

Under the broad authority of the Defense Production Act and the specific legislation indicated below, the shipbuilding program of the Maritime Administration during the reporting period consisted of the following projects:

1. Completed the last of four Liberty ship conversions for which funds were approved under Public Law 663, 83d Congress.
2. Completed 1 of the 4 passenger-cargo ships (P2-S2-11a) being constructed under construction-differential subsidy contracts with allowance for national defense features, title V of the Merchant Marine Act, 1936, as amended.
3. Completed six miscellaneous vessels for the Department of the Navy (MSTS) under Public Law 458, 83d Congress, 2d session.
4. Continued construction of prototype tanker (T5-S-RM2a), Public Law 121, 84th Congress, 1st session.
5. Construction of 1 prototype vessel of the clipper class and the conversion of one Liberty ship to closed cycle gas turbine propulsion, authorized by Public Law 942, 84th Congress, 2d session, have not been initiated due to lack of appropriations.
6. Contracts for construction of 15 cargo vessels were awarded under title V, Merchant Marine Act, 1936, as amended.
7. Completed conversion of one cargo vessel to passenger-cargo and awarded contracts for reconstruction and improvement of two passenger vessels and four cargo vessels; all under title V, Merchant Marine Act, 1936, as amended.
8. Contract for construction of a nuclear-powered passenger-cargo vessel was awarded under Public Law 848, 84th Congress, 2d session.
9. Contract for construction of a hydrographic surveying ship for the Coast and Geodetic Survey, Department of Commerce, was awarded under Public Law 85-115, 85th Congress, 1st session.

10. Authorization to construct, with special subsidy provisions, a superliner passenger ship (sister ship to the steamship *United States*) and a large transpacific passenger ship was covered by Public Law 85–221, 85th Congress, 2d session. However, funds for construction have not been appropriated.

The Maritime Administration continued to survey shipyards of the United States for the purpose of keeping current records of shipbuilding facilities and their capability to handle planned shipbuilding programs, and to compile shipbuilding materials and component schedules required to accomplish such programs.

The mobilization-shipbuilding program based upon guidance received from the Joint Chiefs of Staff and the Department of the Navy remained unchanged during the year. However, a rescheduling of the program within the shipyards became necessary, in order to utilize the additional facilities which will become available in the Great Lakes area as a result of the opening of the St. Lawrence seaway.

Authority: Defense Production Act of 1950, as amended, Public Law 774, 81st Congress; Merchant Marine Act, 1936, as amended; Executive Order 10480, as amended; Defense Mobilization Order VII–7, dated March 7, 1957; and specific legislation above cited.

MAINTENANCE OF RESERVE SHIPYARDS

The Maritime Administration maintains on a standby basis four reserve shipyards at Wilmington, N. C.; Richmond, Calif.; Alameda, Calif.; and Vancouver, Wash., for reactivation in the event of mobilization. During the year, this agency continued to make available, under a revocable permit, portions of these shipyards to other Government agencies, including warehouse space to the Bonneville Power Administration at Vancouver, Wash., berthing space to the Coast and Geodetic Survey at Alameda, Calif., and dormitory facilities to the Department of the Navy at Wilmington, N. C. In addition, about 35 acres of the Wilmington, N. C., shipyard have been leased to the State Port Authority of North Carolina for the construction and operation of the port of Wilmington.

As requested by the Office of Civil and Defense Mobilization, we continued to make available to national defense contractors (on 30-day cancellation permits), critical machine tools and metalworking equipment from the four reserve shipyards.

Authority: Defense Production Act of 1950, as amended, Public Law 774, 81st Congress; Executive Order 10480, as amended.

SHIP OPERATIONS

During the period, a number of Maritime Administration-owned ships were operated under general agency agreements to meet the requirements of the Military Sea Transportation Service. In July 1957, there were 26 such ships in operation. By July 1958, this number had been reduced to 7, of which 5 were refrigerated ships in the Pacific area, and 2 were modernized Liberty ships in the Arctic and European areas, respectively.

As a result of the reduced demand for United States-flag shipping, the operation of Maritime Administration-owned ships under bareboat charter decreased from 133 to 21, during the period of July 1, 1957–August 31, 1958. These ships contributed to the movement of United States Government-sponsored cargoes as well as commercial cargoes.

At the close of Congress, there was pending a bill, S. 1029 and H. R. 4089, to provide the President with ship warrants authority, on a standby basis. This bill would authorize the President to establish priorities in transportation by merchant vessels in the interest of national defense.

Authority: Defense Production Act of 1950, as amended, Public Law 774, 81st Congress; Executive Order 10219; Executive Order 10480, as amended; Merchant Marine Act, 1936, as amended, Public Law 591, 81st Congress.

MAINTENANCE OF THE NATIONAL DEFENSE RESERVE FLEET

The Maritime Administration maintains the national defense reserve fleet, as authorized under the Merchant Ship Sales Act of 1946, as amended. It is composed of some 2,100 oceangoing merchant ships moored in 8 fleet sites strategically located on the 3 coasts of the United States. These ships are in a preserved state and an annual program is carried out to renew preservation as required or to otherwise maintain the ships in sound condition.

Long-range mobilization plans include provisions for the reactivation of reserve fleet ships to provide ocean transportation in support of the war effort. The Office of Civil and Defense Mobilization, the Department of Defense, and the Maritime Administration are currently reviewing these requirements, in order to determine the adequacy of ships in reserve both as to numbers and types. This study, when completed, will provide the basis for the determination of the size and composition of the national defense reserve fleet for the next few years.

Authority: Merchant Ship Sales Act of 1946, as amended.

OCEAN PORTS AND PORT FACILITIES

The Maritime Administration, by redelegation of authority from the Interstate Commerce Commission, is responsible for mobilization planning activities relating to port systems and facilities in the United States, its Territories, and possessions. During the year, major progress was achieved in developing, in cooperation with the port industry, a port preparedness program designed to provide plans for the continued operation of port systems under emergency conditions. The Maritime Administration continued its participation in the processing and evaluation of basic resource data on ports and port facilities at the National Damage Assessment Center of the Office of Civil and Defense Mobilization.

Authority: Defense Production Act of 1950, as amended; Executive Order 10480, as amended; and Interstate Commerce Commission Delegation TM–1, effective April 12, 1957.

INDUSTRIAL PROCUREMENT ALLOCATION PROGRAM

The Maritime Administration continued its participation in the interagency industrial procurement allocation program, in cooperation with the Department of Defense and other Government agencies. The prime objective of this program is to speed the conversion of private industry from peacetime to war production, through the execution of standby procurement agreements which describe in detail the critical items required in the event of mobilization as well as the quantities and rates of production.

The cooperative aspects of this program are designed to eliminate conflicting demands upon the same factory by the Department of Defense and the Maritime Administration, and to assure that private industry will be capable of meeting both the military and the military supporting requirements during mobilization.

Some 25,000 privately owned plants and factories are participating in this program. Of these, about 1,600 are planning with the Maritime Administration for the production of ships, supplies, and equipment required for the merchant fleet in the event of war.

During the past year, 184 allocation agreements were executed with industry and 188 other agreements were renewed. In addition, emphasis was directed toward the updating of the allocation program in consideration of the new concepts and demands of a nuclear war. In this connection, a number of procurement allocations were initiated with small machine shops, foundries and factories located in rural areas which would be less likely to suffer damage in an attack.

Authority: Defense Production Act of 1950, as amended, Public Law 774, 81st Congress; Merchant Marine Act, 1936, as amended; Executive Order 10219, as amended; Executive Order 10480, as amended; and Defense Mobilization Order VII–7, dated March 6, 1957.

OPERATION OF WAREHOUSES

The Maritime Administration operates five warehouses in which are stored supplies and equipment required for the reactivation of ships from the national defense reserve fleets in the event of mobilization, as well as for current and future ship construction, repair, and operation programs.

As a part of this activity, this agency is now undertaking a program of storing complete sets of operating supplies for a limited number of ships at each reserve-fleet site. This will serve to disperse the warehouse stocks and to make the material immediately available at the point of need in the event of mobilization.

Authority: Merchant Marine Act, 1920, as amended; Merchant Marine Act, 1936, as amended.

WAR RISK INSURANCE PROGRAM

The Maritime Administration administers the war risk insurance program authorized under title XII of the Merchant Marine Act, 1936, as amended. This program is designed to provide war risk insurance with respect to vessels, cargoes, loss of life and injury of crews and other persons, and personal effects of crews, when such insurance cannot be obtained on reasonable terms and conditions from the commercial market.

Under this program, 3,920 interim war risk insurance binders were issued through June 30, 1958, covering the period between the time that commercial insurance, subject to a 48-hour cancellation clause in the event of an outbreak of war, is automatically terminated through the operation of such clause, and the time that a full wartime insurance program is placed in effect. In addition, through June 30, 1958, there were 47 policies issued for war risk builder's risk insurance, covering ships under construction, and there were in effect 22 contracts with cargo underwriting agents covering war risk insurance on cargoes.

Authority: Title XII, Merchant Marine Act, 1936, as amended.

MARITIME TRAINING

The Maritime Administration operates the United States Merchant Marine Academy, Kings Point, N. Y., for the purpose of training United States citizens to become licensed officers in the United States merchant marine. During the year, this Academy had an average enrollment of about 900 cadets, of whom about 200 were assigned to serve a year in merchant ships at sea. The Academy is capable of being expanded to quarter and provide training for up to 2,400 men, in the event of mobilization.

The Maritime Administration also administers a grant-in-aid program for State maritime academies, located in the States of Maine, Massachusetts, New York, and California. These schools had an average total enrollment of about 950 cadets.

The Federal and State Maritime Academies are currently graduating about 400 men per year. Graduates are licensed as third mates or third assistant engineers of oceangoing merchant ships and, under arrangements with the Department of the Navy, may be commissioned as ensigns in the United States Naval Reserve.

Authority: Merchant Marine Act, 1936, as amended; Public Law 415, 84th Congress; and Public Law 85–672, 85th Congress.

ABC—RADAR TRAINING PROGRAMS

Through the cooperation of the Department of the Navy, training programs were continued at New York and San Francisco for the indoctrination of merchant marine personnel in defense against atomic, biological and chemical warfare, damage control, and fire fighting. In July 1958, a similar program was established in New Orleans. In addition, the Maritime Administration established a radar interpretation training course for merchant marine officers in each of the above ports.

These courses have been enthusiastically received by merchant marine personnel and the shipping industry. They are expected to result in safer and more efficient operation of United States-flag ships, and provide a better understanding by merchant marine personnel of the methods required for the defense and safety of their vessels under emergency conditions.

Authority: Defense Production Act of 1950, as amended; Executive Order 10219.

EMERGENCY PREPAREDNESS PROGRAM

Significant actions taken during the period to improve this Agency's emergency preparedness capabilities include the following:

1. Operation Alert, 1958: the Maritime Administration participated with other Government agencies in the relocation exercise OPAL 1958, pursuant to directives of the Office of Civil and Defense Mobilization. This exercise served to test existing emergency plans and procedures, and to identify problems which would be encountered in operating from a relocation site under attack conditions.

2. Preparedness projects: There was developed a list of 25 preparedness projects considered necessary for emergency planning purposes.

3. Emergency action manuals: There were developed four emergency action manuals covering ship operation, ship construction, port control, and property and supply activities required in the event of mobilization.

4. Emergency redelegation of authorities: An order was issued covering emergency redelegations of authority to Washington and field officials, including line of succession to insure continuity of operations in an emergency.

5. Relocation file: A file is maintained at the relocation center, wherein are deposited on a continuing basis copies of all documents considered necessary for the conduct of activities and programs of this agency in an emergency.

NATIONAL DEFENSE EXECUTIVE RESERVE

Pursuant to Executive Order 10660, a complement of national defense executive reserves has been selected to serve with the Maritime Administration in key civilian positions during periods of emergency. These reservists have been selected, primarily, from various segments of the shipping industry.

By August 30, 1958, 70 such reservists have been fully designated and approved for possible emergency duty. This agency is continuing necessary action to complete the authorized complement of 123 reservists and to arrange for periodic training exercises to acquaint them more fully with their prospective emergency duties.

Authority: Defense Production Act of 1950, as amended; Executive Order 10660; and Defense Mobilization Order I–21 (revised).

PROGRESS ACHIEVED IN THE CONTINUITY OF GOVERNMENT, CONTINUITY OF PRODUCTION, AND THE DISPERSAL OF INDUSTRY

The basic wartime control of shipping organization planned for the United States contemplates that the Maritime Administration will perform all the necessary functions for which it has legislative and executive authority, pending the establishment of an emergency transport agency.

The Maritime Administrator has taken steps to delegate his authorities to certain officers normally located in Washington, and then, in a named order of succession, to the directors of the three coast districts and to the area representatives in a number of United States seaports. Hence, in an emergency, provision has been made for the continuity of succession in the conduct of activities of the Maritime Administration, with each officer empowered, should emergency conditions so require, to operate independently in the absence of communications or instructions from headquarters, and with the full power and authority of the Maritime Administrator.

Continuity of production and dispersal of industry are prime considerations in connection with the following activities: (1) the selection of possible new shipyard sites which may be required to implement the mobilization programs; (2) the allocation of ship construction contracts to strategic areas of the United States, under Public Law 805, 84th Congress; (3) maintenance of the national defense reserve fleets at 8 fleet sites, 3 on the Atlantic coast, 3 on the Pacific coast, and 2 on the gulf coast; (4) storing of marine supplies and equipment in warehouses and at the reserve fleet sites in each coast district; and (5) execution of industrial procurement allocation agreements with private industry. In the latter connection, allocations are being initiated at an accelerated pace with machine shops, foundries, and factories in rural areas, in order to assure the availability of materials needed for a fast recovery of the merchant fleet after an attack.

SUMMARY OF STANDBY PROGRAMS

With few exceptions, all Maritime Administration activities enumerated in this report are, wholly or in part, in the nature of standby programs. These programs are designed to be implemented or expanded in the event of mobilization to meet the national defense requirements for merchant shipping.

MANNER IN WHICH MOBILIZATION PROGRAMS FIT INTO DEFENSE PLAN AND OBJECTIVES TO BE ACHIEVED

It is the declared policy of the United States, as set forth in the Merchant Marine Act, 1936, as amended, and the Merchant Ship Sales Act of 1946, as amended, to foster the development and maintenance of an adequate and well-balanced merchant marine, in the interest of national defense as well as its foreign and domestic commerce. The need for such a merchant marine for national defense purposes has been demonstrated in the past and was reaffirmed by the National Security Council, during the past year, under current

strategic and logistic concepts of war. The American merchant marine, including the privately owned fleet which will become available for national defense in the event of mobilization, has been called the fourth arm of national defense.

In line with the above objectives, the mobilization programs of the Maritime Administration are developed in close liaison with the Department of Defense and its several components, as well as the Office of Civil and Defense Mobilization, and, at the international level, with the NATO naval authorities. This is necessary in order to assure that the mobilization plans of the Maritime Administration will be in harmony with national and international plans for the naval control of shipping and be keyed to the requirements of the Department of Defense, in time of war or national emergency.

Business and Defense Services Administration

AUTHORITY AND RESPONSIBILITIES

The Business and Defense Services Administration was established on October 1, 1953, by Department of Commerce Order No. 152 (18 F. R. 6503) as amended and revised. It succeeded the National Production Authority which was abolished by the same order. The current version of Department of Commerce Order No. 152 (Revised) was issued on September 22, 1958, and transfers the Office of Area Development to the Business and Defense Services Administration. The functions and authority of the Secretary of Commerce, including but not limited to those under the following, have been delegated by the Secretary to the Administrator of BDSA pursuant to Department Order No. 152:

1. Defense Production Act of 1950, as amended, providing for exercise of priorities and allocations powers, expansion of productive capacity and supply, and development of preparedness programs (except with respect to the use of transportation facilities and the creation of new agencies within the Department of Commerce).
2. National Security Act of 1947, as amended, providing for a wide range of mobilization preparedness activities.
3. Strategic and Critical Materials Stockpiling Act of 1946, as amended, with respect to determinations as to which materials are strategic and critical, and the quality and quantity to be stockpiled.
4. Internal Revenue Code of 1954, as amended, with respect to accelerated tax amortization for specificed national defense purposes.
5. Executive Order 10480, as amended, providing for administration of the nonmilitary defense mobilization program.
6. Executive Order 10421, as amended, providing for physical security of facilities important to the national defense and for direction of the Industry Evaluation Board by the Secretary of Commerce.

In addition, various Office of Civil and Defense Mobilization orders, denominated as defense mobilization orders, specify functions and authority under which BDSA engages in its defense production and mobilization preparedness activities. These include, but are not limited to, DMO I–7 (delegating priorities and allocations responsibilities), DMO I–8 (assigning defense mobilization responsibilities to the Department of Commerce), DMO I–19 (providing for guidance and assistance in the application of dispersion policy), and DMO VII–5 (designating supply and requirements agencies).

ADMINISTRATIVE DEVELOPMENTS

During the reporting period an intensive review was made of all current and long range industrial preparedness programs conducted by the BDSA with the objective of obtaining more efficient utilization of manpower and improved operations. Direction and leadership has been strengthened through redifinition of assignments and the delegation of followup and coordinating responsibility to specific staff officers. A monthly progress reporting system has also been established to assure that the program objectives are proceeding on schedule.

The appropriation for fiscal year 1959 provided for a small increase in the staffs of a few industry divisions which were understaffed following the 1957 agencywide reduction-in-force. Through careful recruitment and followup training of selected candidates, these divisions will shortly be better equipped to carry out their delegated responsibilities, particularly with respect to the Defense Production Act and related programs.

On July 1, 1958, the Office of Technical Services took on the new function of collecting and processing foreign scientific research documents in the fields of technology and applied science. With this program underway the Office is now the central point in the Government for the collection and dissemination of this material to United States science and industry. The program is a valuable aid to the agency's industrial preparedness and other defense programs in that approximately 40,000 abstracts on scientific research are expected to be made available to industry during fiscal year 1959.

The conduct of the defense production and mobilization preparedness activities of the Business and Defense Services Administration has continued to require the services of able men from industry appointed in accordance with the provisions of the Defense Production Act of 1950, as amended, and Executive Order 10647. As of September 1958, 80 executives from private industry were serving the BDSA without compensation. Of these, 14 were serving in full time advisory positions. The BDSA will continue to utilize the services of industry executives on a WOC basis as authorized by the Defense Production Act, as amended.

PROGRESS ON CURRENT DEFENSE PROGRAMS

Special assistance for military and AEC programs

During the year beginning October 1, 1957, BDSA processed 3,333 special-assistance cases representing a value of $129,388,871.

These figures reflect a decrease of 60 percent in the number of cases and 69 percent in dollar value compared to the year beginning October 1, 1956, when 8,400 cases having a dollar value of $414,413,223 were processed.

This decrease is largely due to an easing of supply of a number of materials coupled with the curtailment of certain DOD programs which became evident during the period of this report. Another contributing factor is the delegation of authority issued by BDSA to DOD to use the DX rating authority for the missiles program.

The major areas of tight supply which continue to require special assistance are scientific instruments, electrical equipment, certain nickel alloys and electronic equipment, with emphasis on the latter.

Further details regarding the special assistance cases processed by BDSA during the year beginning October 1, 1957, are shown in the attached table.

Special assistance report for calendar year ending Sept. 30, 1958

	Cases	Value
Directives and DX ratings:		
Department of Defense [1]	1,183	$40,290,272
Atomic Energy Commission	114	3,112,574
Canadian	15	51,806
All others	4	0
Total	1,316	43,454,652
Priorities (DO ratings):		
Canadian	356	73,199,318
Foreign	26	107,454
Private (D program)	6	1,273,900
Total	388	74,580,672
DMS (controlled materials):		
Canadian military (C–5)	32	4,138,283
Canadian atomic energy (E–4)	5	1,244,200
Foreign (munitions list) (C–4)	0	0
Foreign (mutual assistance) (C–6)	0	0
Private (defense-supporting) (D–5)	13	5,971,064
Total	50	11,353,547
Interim actions (M–41)	1,301	0
Allocation and production directives	278	0
Total [2]	1,579	0
Grand total [3]	3,333	129,388,871

[1] Includes 608 cases for which no dollar value was available.
[2] Production schedules and allocation directives, dollar value not involved.
[3] Estimated. Month of September 1958 estimated, based on caseload for August.

OPERATIONS AFFECTING BASIC MATERIALS

Aluminum and magnesium

Aluminum set-asides under the defense materials system amounted to 119 million pounds for the first calendar quarter of 1958 and 108 million pounds for each of the next 3 calendar quarters. The total for the calendar year 1958 was 443 million pounds, a decline of 19 percent from the 1957 set-aside.

Under the provisions of the expansion contracts made by the primary producers with the General Services Administration covering production of the new facilities developed during the Korean emergency, the companies have been "putting" substantial amounts of metal to the Government. The "put" provisions of most of the contracts will have expired by September 30, 1958.

A report on the adequacy of aluminum supply to meet mobilization requirements was prepared for the Office of Civil and Defense Mobilization. The report showed that because of increased capacities and decreased requirements the mobilization needs could be met from existing capacity.

Studies of various products, incuding alumina, primary aluminum, sheet and plate, and others, were prepared for the use of the Industry Evaluation Board.

A supplement to the confidential section of the materials survey on aluminum was completed, bringing up to date information on individual United States plant capacities in various products. Data on world trade in aluminum are being compiled and will be published to bring this information in the world survey up to date. A revised directory of aluminum suppliers was prepared in November 1957.

The quota for aluminum scrap exports, which had been open-ended for the last two calendar quarters of 1957, was removed in the first calendar quarter of 1958 and exports were subject only to security control.

A special study of magnesium casting capacities was completed, in collaboration with the Magnesium Association.

Copper

The rephasing program for deliveries of refined copper to the Government by producers who had deferred such deliveries due under contracts was practically completed in the fourth quarter 1957. Scheduled deliveries of refined copper increased sharply in fourth quarter 1957, first quarter 1958, and second quarter 1958. Actual deliveries of both scheduled and deferred amounts of refined copper for the period of three quarters were 102,420 short tons. Deliveries in the third quarter 1958 are expected to be equally heavy, due to the price situation which makes deliveries under Government contract prices more attractive than sales in the open market.

In cooperation with the Bureau of Foreign Commerce definitions and background information concerning coaxial cable, single or multitube types, communications cable of any type containing more than one pair of conductors and containing any conductor (single or stranded) exceeding 0.9 mm. in diameter; and communications submarine cable of all types were developed. This was used in connection with the international review of cooperative controls of exports to the Soviet bloc (COCOM committee).

Exports of copper raw materials, which include refined copper scrap, and ingot, were removed from short-supply export controls and retained on the positive list for security reasons only. One exception was copper-nickel alloy scrap containing 5 percent or more of nickel.

A feasibility study covering supply and demand for refined copper and copper-base scrap, including scrap generation was completed during first quarter 1958. The study is used by the Office of Civil and Defense Mobilization Interagency Committee in compiling new copper stockpile basic data sheets.

A survey was completed of OFHC (oxygen free high conductivity) copper-billet sizes used by brass mills for the purpose of assisting and advising Office of Civil and Defense Mobilization in drafting a revised set of stockpile copper specifications.

Analysis and review of Industry Evaluation Board studies continued throughout the period. Additional information was developed concerning wire mill facilities and production. A survey of the production facilities required for watertight shipboard cable in a mobilization period was completed.

Iron and steel

All iron and steel requirements of the defense program were met in full during the past year. Set-asides were adjusted as needed, to maintain coverage of defense requirements.

A study of the ability of the iron and steel industry to meet full mobilization requirements under a nonattack situation was submited in the fourth quarter of 1957 to the Office of Civil and Defense Mobilization. This study covered ingot requirements as well as product requirements by major categories; namely, plates, shell steel, structural shapes, bars, pipe and tubing, etc., separately for carbon, alloy, and stainless grades.

A further study, based on the average effect of a number of various nuclear bombing attacks on the United States calculated for planning purposes was underway in the third quarter of 1958. This study will show the capability of the iron and steel industry to meet requirements under these conditions and will contain recommendations for preattack planning to overcome any anticipated shortages in steel ingots and steel mill products, as well as castings and forgings.

A mobilization base study of pig iron and ferrous scrap was submitted to OCDM. This study covered both requirements and supply under full mobilization, nonattack conditions. The pig-iron requirements data served as a basis for a determination of iron ore needs, for use by the Department of the Interior in its own mobilization studies.

A survey of capacity for making light steel castings—armor castings 1,500 pounds and under and other castings 10,000 pounds and under—was completed. Further work on this matter awaited the development of new requirements data.

Plans were made for capacity surveys of both the closed die and open die forging industries, to bring information up to date on forgings as well as auxiliary equipment, such as heat treating and rough machining. The proposed questionnaires are under review by industry representatives for their advice. Studies of capacity for producing jet engine blades and shell forgings were completed. A revision of the component study on the open die industry revealed that previously indicated deficiencies could be taken care of by the adaptation of available facilities.

Meetings were held with representatives of both branches of the industry. At a meeting of the Open Die Press and Hammer Forging Industry Advisory Committee, the future growth of nuclear power programs was discussed and at a meeting of a task group of that committee, the capacity survey described above was considered. A task group of the Closed Die Industry Advisory Committee, meeting in September 1958, discussed the relationship of present capacity and current defense requirements.

A survey of ferroalloy capacity was completed and served as the basis for an Industry Evaluation Board study of this industry. With respect to each producer of more than one ferroalloy, the survey provides alternative capacities, depending on which alloy is given primary consideration. A study of ferroalloy usage to determine requirement factors in the production of alloy and stainless steels and nonferrous high-temperature alloys is underway.

In connection with Government stockpiling, recommendations were made to OCDM with regard to changes in specifications, packaging and upgrading of certain materials.

A questionnaire survey was begun at the end of September 1958, to obtain information on capacity for melting and rolling stainless steel, high-temperature alloys, and certain nonferrous metals. This survey will provide data not already available for use in measuring the ability to meet defense and mobilization requirements, in industry evaluation board studies, and in other phases of mobilization planning.

A number of Industry Evaluation Board studies was completed or revised during the year.

Nickel alloys

The shipments of nickel alloys to fill defense orders has shown a gradual decrease from the fourth quarter of 1957 through the second quarter of 1958. Figures for the third quarter of 1958 are not available at this time.

Miscellaneous metals and minerals

For the first time in a number of years ample supplies of diamond crushing bort and powder were available to industry during 1958. Factors combining to result in the favorable supply situation included the availability of supplemental supplies of synthetic diamond, reduced demand for bort-containing products, a satisfactory level of imports, and the absence of any drain on supply through acquisitions by the Government of quantities in excess of the normal amount acquired for the stockpile under contract with the foreign producer and distributor. Quantitative restrictions on exports were removed May 6, 1958.

A marked improvement occurred during the year in deliveries to the stockpile of strategic qualities of block and film mica. Despite the acceleration in acquisitions, however, the objectives for all types of strategic mica have not yet been met.

Supplies of lead and zinc were in excess of demand throughout the year. Domestic mine production of the two metals decreased approximately 15-20 percent due primarily to higher imports, considerably lower consumption, low prices, and increasing smelter stocks of refined metal. From September 30, 1957, through July 30, 1958, smelter inventories of lead increased 204 percent to a high of 164,000 short torns, and zinc inventories increase 65.6 percent to a high of 257,900 short tons.

Government purchases of metal produced from domestic mine production were terminated during the year (zinc as of March 31, 1958, and lead as of June 30, 1958). The price of prime western zinc f. o. b. East St. Louis, 10 cents per pound, was maintained throughout the year, with some shading on premium grades while common lead f. o. b. New York dropped from 14 cents September 30, 1957, to 10.75 cents on August 13, 1958.

During the year the Tariff Commission conducted hearings on the lead and zinc situation, resulting in their recommendation to the President on April 24, 1958, for increased tariff rates and import quotas. The President deferred action on the Tariff Commission recommendation pending the outcome of the proposed Domestic Minerals Stabilization Act of 1958. This bill was defeated by the Congress during the final days of the session. A United Nations exploratory meeting will be held in London the week of September 8, 1958, to discuss the low world prices and the market instability of lead and zinc. It is expected that a decision on the Tariff Commission recommendation will be announced by the President after this meeting.

The satisfactory tantalum supply situation continued through the third quarter of 1958. Capacity was increased substantially by the opening of a large new processing plant in the fourth quarter of 1957. Demand for capacitor grade metal, which leveled off in the fourth quarter of 1957, has increased materially during the second and third quarters of this year.

The production of titanium mill products went down to a dangerously low level during the fourth quarter of 1957 (less than 750,000 pounds), as consumers adjusted their inventories to lower rates of aircraft and engine production. However, output stabilized in 1958 at a rate of 400,000 to 500,000 pounds monthly. BDSA Order M-107, which provided for the scheduling of mill product deliveries, was considered no longer necessary and was revoked on January 14, 1958. The Government contract with Cramet, Inc., for the production of titanium sponge was terminated on March 7, 1958, and ownership of the Chattanooga plant was assumed by the General Services Administration. Producers of both titanium sponge and mill products continued their efforts to develop commercial markets for the metal.

The production of hafnium-free zirconium was greatly increased during 1958, as two large new plants that had been having quality problems began producing material meeting contract specifications. There were indications that the zirconium industry, like the titanium industry, faced a long battle to develop commercial uses for its product.

CURRENT SUBJECTS RELATED TO DEFENSE PRODUCTION

Nickel

The demand for nickel decreased substantially during the fourth quarter of 1957 when practically all of the premium price and an appreciable quantity of market price nickel scheduled for shipment under Government contract and authorized for diversion to industry was not purchased by consumers. This situation became even more pronounced during the succeeding quarters as a result of which the DPA inventory accumulation at the end of June was about 85 million pounds. It is expected that the figure for DPA inventory will exceed 100 million pounds by September 30.

In addition to the large DPA inventories, it is estimated that the nickel producers have also accumulated in excess of 50 million pounds of nickel. This has resulted from sharply decreased rates of nickel consumption and excess in plant inventories of nickel and nickel-bearing alloys by the consumers of these materials which are being liquidated before making purchases requiring additional nickel.

Present nickel production has been curtailed about 35 percent below capacity. This level of output is more than ample to meet current consumer demands.

The production capacity during 1959 and 1960 is scheduled to be increased over the present level by some 125 million pounds. In the light of the above availability from inventories and new production, efforts are being made to discourage nickel conservation practices in both civilian and military applications. The degree of success which is achieved in this effort will have an important bearing on the amount of expenditure for further accumulation of nickel by the Government.

During the period when nickel supply was not sufficient to meet demand, all consumers who were authorized to use priority ratings to acquire nickel for defense orders did so—whether DMS regulations required them to do so or not. When nickel became plentiful, action was taken to insure that all defense orders for nickel were so identified on a mandatory basis. The regulations and rules were amended (DMS Regulation 1, amendment 2 of March 10, 1958) to require controlled material producers to use defense program identifications on purchase orders for defense nickel. This was calculated to have the effect of providing the Government with information needed to determine the total impact of defense purchases on the nickel supply by summarizing producers' shipments.

Currently and during past months, however, considerable nickel and nickel-bearing alloys are being used to fill defense orders from inplant inventories without replacements of such material by new purchases. The absence of the flow of purchase orders bearing defense program identifications therefore has the effect of substantially understating actual consumption of nickel for defense purposes at the present time. There is presently under consideration by the Business and Defense Services Administration, the OCDM, and the DOD a company-by-company survey to obtain realistic figures on defense use of nickel. The effect of the amendment, mentioned above, will not be reflected in shipment data until consumers once again purchase at level roughly equivalent to their use.

The Department released a report on the nickel outlook in December 1957 which forecast the general nickel supply and consumption situation for 1958. An additional report on this general subject is in progress. This will cover the anticipated nickel supply and consumption for the United States in 1958 and the outlook for future facilities for nickel production in the free world as well as future United States supply of nickel.

Liquid oxygen and nitrogen

During the past 12 months the liquid oxygen-liquid nitrogen plant expansion program under the OCDM goal No. 229 was 95 percent completed. Only two of the plant expansions covered by certificates of necessity remain to be completed. Additional expansions not covered by the goal have provided even more capacity than required to meet the goal. All present and currently foreseeable demands for these liquefied gases for the missile program can now be met. Unless the Department of Defense revises its estimates of future requirements for these gases, there should be sufficient capacity to meet all expected demands of both industry and the Government through 1960. Small business participated in this expansion program.

Electronics

The shortage of tantalum capacitors for use in missiles and other defense applications, which has been a problem for over a year, is currently overcome. Scheduling of deliveries of certain types was discontinued in March. The producers of capacitor grade tantalum metal have been encouraged to expand their capacity, additional producers have been introduced, and consequently the capacity for the production of tantalum capacitors has been expanded to the point that requirements are being met in full.

To meet defense and AEC requirements on telemetering equipment, it was necessary to schedule deliveries of telemetering equipment produced by a Florida firm. BDSA issued a blanket directive to cover DX and DO rated orders, a total of 276 customers' orders were directed to be delivered in March, April, May, June, and July to meet urgent AEC and military requirements. The scheduling of this company's production was discontinued July 31, 1958, due to improvement in deliveries from all sources.

During the second and third quarter of 1958 directive action continued, however, to be necessary in the area of semiconductors, miniaturized relays, and certain electron tubes. In several cases it was necessary to schedule the complete production of certain special types of transistors and electron tubes.

It is anticipated that as equipments previously in prototype form go into production, as the missile program accelerates, and as the activities of the

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National Aeronautics and Space Administration expand, directive action will be required to channel the output of new components to the most essential uses.

Ferrous scrap

The agency's report of February 1, 1957, to the Congress on iron and steel scrap indicated the probability of an excess of withdrawals of heavy melting scrap over additions to the scrap reserve under conditions of continued high levels of steel production and, for this reason, the necessity to hold consultations with both domestic and foreign consumers regarding plans to reduce dependence on this form of scrap. Meetings with representatives of foreign consumers led to a voluntary limitation of their purchases of heavy melting scrap during 1957 to the 1956 levels plus 13 percent.

With respect to 1958, meetings were held during October 1957 with four groups of scrap users and scrap dealers for the purpose of determining a course of action on export controls for both melting scrap and rerolling rails. These groups were as follows: iron and steel scrap dealers, steel industry representatives, rerolling rail dealers, and rerolling rail users. Since estimates of both domestic and foreign requirements in 1958 for heavy melting scrap showed a substantial decrease from 1957 usage and since the objective of a downward trend in foreign demand for this grade of scrap was apparently being achieved, voluntary limitations on imports by the major foreign consumers were not considered necessary for 1958. With the decline in demand for all types of scrap, which became even more pronounced during 1958, the following export control actions were taken:

Iron and steel scrap was placed under open-end quota for the entire year of 1958.

For the first quarter of 1958, the quota for rerolling rails was set at 7,000 tons; during the second and third quarters they were under open-end quota and for the fourth quarter they have been removed from short-supply controls but retained on the positive list for security reasons.

During the first, second, and third quarters of 1958 relaying rails were under open-end quota. For the fourth quarter short-supply controls were removed but this material was retained on positive list for security reasons.

In February 1958, the Agency submitted a supplementary scrap report to the Congress, in which were discussed refinements in the data on scrap demand and supply and steps which had been taken as corrective actions, both in domestic and foreign areas. This supplement included a study of industrial scrap generation, released in the fourth quarter of 1957, which for the first time gave a detailed analysis of this important segment of the scrap industry. On the basis of these additional studies, the supplemental report pointed out that the conclusions of the original report were substantiated, although the prospective supply-demand imbalance of heavy melting grades over the next few years would be less than first contemplated. Surveillance over heavy melting scrap withdrawals and over the level of exports will continue to be maintained by the Department.

COMPLIANCE AND ENFORCEMENT

In furtherance of BDSA's defense and mobilization planning responsibilities, the compliance and enforcement staff has devoted increasing time throughout the year to assisting the industry divisions in securing compliance with mandatory reporting requirements under the Defense Production Act. Several compliance programs are now being successfully concluded in this area. However, still underway is the survival items statistical program covering some 10,000 manufacturers who are now returning questionnaires which will provide information relative to productive capacities and inventory data applicable to more than 100 items being surveyed. Undoubtedly, followup compliance measures will be necessary before the survival items survey can be completed. Procedures have been developed to handle anticipated delinquencies which will make full utilization of the Bureau of the Census, the industry divisions of BDSA, Department of Commerce field offices, and, as a last resort, the BDSA compliance staff. While in several instances it has been found necessary to deal firmly with delinquents, to date no case has developed requiring formal legal action under section 706 of the Defense Production Act.

The present easy nickel situation does not affect prosecution of the backlog of cases involving the illegal use of priorities to obtain nickel. While two such cases are presently being prepared for transmittal to the Criminal Division of the Department of Justice, 10 cases in which criminal prosecution was recommended to the Department of Justice are now in the hands of the respective United States attorneys, and in one of these cases an indictment has been returned. Seven reports of investigation conducted by compliance investigators in the field are presently under consideration to determine whether willful and significant priorities violations warranting criminal prosecution have been established.

Included herein is a résumé of court action disposing of criminal cases since the inception of the Business and Defense Services Administration in October of 1953. Successful prosecution has contributed measurably to the BDSA compliance and enforcement program. A flourishing black market in nickel on the west coast was dealt a successful blow. The operators of a large black market in steel which flourished during the Korean crisis were successfully prosecuted. Willful violations of the Defense Production Act are prosecuted under the provisions which makes such violations a misdemeanor punishable by fine or imprisonment, or both. In one case the defendants were required to serve the jail sentences imposed by the court. In other cases sentences were suspended.

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Court action disposing of criminal cases since Oct. 1, 1953

Name	Date referred to Department of Justice	Date of indictment or information	Type of material	Date of disposition	Disposition
U. S. v. *Mefford Chemical Co. et al.**	Dec. 11, 1953	Aug. 9, 1957 Dec. 30, 1957 Jan. 3, 1958	Nickel	May 26, 1958	Defendants entered guilty pleas, were given suspended jail sentences of 1 year, put on probation, and fined.
U. S. v. *Nagle Rubber & Chemical Corp.*	Oct. 16, 1956	Mar. 15, 1957	do	June 24, 1957	Defendants entered guilty pleas, 2 individual defendants fined $5,000 and given 60-day jail sentences, corporation fined $5,000.
U. S. v. *Bernard Schwartz and Consolidated Metal Manufacturing, Inc.*	Dec. 12, 1955	Nov. 8, 1956	do	Apr. 17, 1957	Case dismissed against individual defendant and corporation fined $1,000.
U. S. v. *John L. Kern, Inc., et al.**	Apr. 13, 1956	Nov. 16, 1956	Steel	Nov. 15, 1957	Largest black-market case, involving approximately 5,000 tons of steel. Fines imposed in amount of $239,000 reduced by remission to $26,000. Defendants were given suspended jail sentences of 1 year and put on probation.
U. S. v. *Hillside Metal Products, Inc., et al.**	Aug. 6, 1952	May 29, 1953	do	Feb. 5, 1957	Corporation fined $6,000. Counts against individual defendant dismissed.
U. S. v. *C. R. Schuster**	Apr. 7, 1953	June 7, 1954	Steel (oil country tubular goods).	July 1955	Defendant entered guilty plea, jail sentence suspended, given 5 years' probation and $10,000 fine.
U. S. v. *Advanced Can Co., Inc., et al.**	Apr. 4, 1954	July 28, 1954	Steel	Oct. 4, 1954	Individual defendant given suspended jail sentence, 2 years' probation and $500 fine
U. S. v. *Roberts Manufacturing Co.**	May 28, 1952	June 23, 1953	do	Oct. 7, 1954	Order dismissing indictment.
U. S. v. *James Olin Mfg. Co. et al.**	July 20, 1953	May 25, 1954	Steel (nickel bearing stainless steel).	Nov. 19, 1954	Indictment dismissed as to Speidel Corp., manufacturer of metallic wristwatch bracelets. Fine of $500 imposed on each of other defendants, 3 individuals and James Olin Mfg. Co.
U. S. v. *Charles Jackson, et al.**	May 19, 1952	Nov. 19, 1952	Steel (oil country tubular goods).	Nov. 2, 1953	Three defendants entered guilty pleas and received jail sentences of 181 days each.

NOTE.—On Oct. 1, 1953, the Business and Defense Services Administration (BDSA) was created by Department Order No. 152 as a primary organization within the Department of Commerce, continuing the residual defense and mobilization functions of the National Production Authority (NPA) which was abolished by the same Department order. The cases above listed which were disposed of since the inception of BDSA involve violations of both BDSA and NPA orders and regulations. The cases marked with an asterisk (*) originated under NPA. Ten cases which were referred to the Department of Justice are now pending in varying stages of proximity to trial. Additional nickel cases which came to light during the nickel shortage are under consideration for referral to the Criminal Division, Department of Justice, and others are currently under investigation.

PROGRESS ON INDUSTRIAL MOBILIZATION PREPAREDNESS PROGRAMS

Development of industrial mobilization plans

Following Operation Alert, 1957, the Director of the then Office of Defense Mobilization established a task group under the chairmanship of a member of the staff of the Business and Defense Services Administration to review the priorities system to determine the most effective type of system which should be employed in an attack situation to meet the post attack survival needs of the Nation. The assignment of the task force included the determination of whether a single or multiple band priority rating system should be employed under such conditions. The task force consisted of two representatives of BDSA, and a representative of the Department of Defense, Atomic Energy Commission, and the Federal Civil Defense Administration, respectively. In considering the assigned subject the task force consulted with representatives of the Departments of Agriculture and Interior.

The effectiveness of the emergency priorities system employed in OPAL 1957 was reviewed by the task force and the objections raised by the Department of Defense with the support of the Atomic Energy Commission were considered. The emergency priorities system under review consisted of a single priorities designation applicable to a limited number of activities which had been determined to be of the utmost essentiality in an attack situation.

The task force submitted a recommendation to the Emergency Resources Board in which it was concluded that the present priorities mechanism under the Defense Materials System would be more effective in an attack situation than the emergency system employed during OPAL 1957 and recommended the retention of this system for planning purposes with standby provisions for expansion of the system to meet post-attack needs.

The conclusion and recommendations of the Task Group were approved by the Emergency Resources Board and the BDSA revised the emergency standby regulations, which had been previously developed for an attack situation, in accordance with the revised policy on priorities. These revised regulations were reviewed by all of the interested agencies and comments and recommendations submitted by them were incorporated in the emergency regulations which were employed during OPAL, 1958, with satisfactory results.

The Industrial Production Section of the emergency mobilization plan for an attack situation was revised by BDSA during the past year to include improvements and revisions based upon the experience developed by the test of this section of the plan during OPAL, 1957.

Shortly after the effective date of the President's Reorganization Plan No. 1, combining the Office of Defense Mobilization and the Federal Civil Defense Administration into the new Office of Civil and Defense Mobilization, the Director of the new agency distributed for review by affected agencies a working draft of the national plan for civil defense and defense mobilization. This national plan differs from the national plans discussed in previous reports in that it relates to the emergency responsibilities of all elements of the country, including the Federal Government, State governments, local governments, and the public. It is intended that this national plan will serve as the basic policy guidance for all detailed emergency plans developed at all levels of government, which will be required to be compatible with the national plan when it is approved in final form. In accordance with this revised approach to national nonmilitary defense planning, BDSA is engaged, in cooperation with other agencies of the Federal Government, in the revision of the Federal emergency plans for the type of emergency involving hostilities without attack on the United States. The Federal emergency plans for an attack situation will be revised in this context in the near future.

Survival items program

Considerable progress was made in the statistical portion of the survival items program during the year covered by this report. The program, while initiated more than 2 years ago by ODM, required approximately a year for the determination of criteria and the development of a list of items deemed essential to the maintenance of life in the event of an attack upon the United States.

During the last quarter of 1957, after a thorough analysis of information availability on the 176 survival items for which it has responsibility, BDSA completed its plans for surveys of the producers of some 100 items to determine

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production capability and inventory levels. The surveys were begun soon after approval by the Bureau of the Budget and issuance by ODM of its February 7, 1958, press release announcing the program and the tentative list of items. At the close of the third quarter of 1958, a major portion of the manufacturer surveys had been completed, with more than 10,000 questionnaires sent to manufacturers and almost 7,000 replies received. A few additional surveys are in preparation or are being considered. Meanwhile, much work is being done in BDSA in editing and tabulating reports received, corresponding with manufacturers to clarify data submitted and following up firms delinquent in reporting. In accordance with plans agreed to by OCDM, manufacturer survey forms, after being processed by BDSA, are sent to the Census Bureau to be recorded on electronic computer tapes. The tapes will be utilized by the OCDM National Damage Assessment Center in its computations of supply requirements under various attack assumptions and in the event of an emergency. It is anticipated that the manufacturer surveys will be completed in the fourth quarter of 1958.

The surveys of wholesale inventories of survival items were begun in the second quarter of 1958 with the mailing of questionnaires to a group of 368 electrical wholesale firms covering 14 items normally carried in inventory in substantial quantities by them. Plans for surveys of plumbing and heating goods wholesalers and lumber and millwork distributors have been completed and these should be underway soon. A survey of wholesale drug, surgical, and hospital supply houses has been undertaken by the Department of Health, Education, and Welfare. At least five other wholesale areas will be covered by BDSA in developing wholesale inventory data. All of the BDSA wholesale surveys are being conducted by the Census Bureau on a sampling basis using the reporting panels of their Monthly Wholesale Trade Report. The reports received will provide the basis for estimates of wholesale inventories of survival items for each State and standard metropolitan area. The wholesale data, like the manufacturer data, will be put on electronic computer tapes by the Census Bureau for use by the National Damage Assessment Center. Every effort will be made to complete the wholesale surveys in fiscal year 1959. Retail surveys of survival items inventories have not yet begun except for a small pilot study of drug stores conducted by the Census Bureau. Retail surveys will be undertaken in fiscal year 1959 and will, of course, be on a sampling basis in view of the tremendous number of retailers of survival items.

The survival items surveys are moving ahead as planned. However, much work remains to be done before there can be a matching of supply and requirements and decisions made concerning appropriate remedial measures where deficiencies are found to exist.

DMS and related activities

It was stated in the previous annual report that a thorough review of the defense materials system would be undertaken" * * * for the purpose of determining the advisability of further simplification of this system, improving the information concerning military and atomic energy requirements, and to develop such revisions in the system as will permit greater adaptability to meet emergency needs." In accordance with this statement an interagency group was established for this purpose consisting of representatives of the BDSA, the Office of Defense Mobilization (now OCDM), the Department of Defense, and the Atomic Energy Commission. Pursuant to discussions held by this group, the staff of BDSA has prepared a preliminary draft of a revised DMS regulation incorporating a number of simplified procedures, designed to reduce the paperwork imposed on both industry and Government agencies in the operation of the present system, while at the same time retaining the flexibility to permit immediate expansion to meet the needs of an emergency situation. The extended term of OPAL 1958 has delayed the pursuit of this proposed revision of the regulations and it is intended to continue this project in the near future. In addition to consideration of the views of the affected agencies of the Federal Government, consultations will be held with representatives of the major industries which will be affected by any proposed changes in the system.

The following amendments to the DMS regulations and related regulations and orders were issued during the past 12 months to meet the needs of changing conditions:

(1) On January 20, 1958, DMS Regulation 1 was amended to require producers of controlled materials to use the rating DO–B–5 in obtaining primary nickel as a production material needed to fill defense orders for controlled material. Similar amendments were issued on the same date to BDSA Orders

M–1A (iron and steel), M–1B (nickel alloys), M–5A (aluminum), and M–11A (copper and copper-base alloys), making it mandatory for distributors of controlled materials to use defense identifications on their orders to replace inventories of nickel-bearing controlled materials. These changes in the rules were made in order to enable BDSA to obtain more complete information as to the effect of defense orders on nickel suppliers.

(2) On March 10, 1958, DMS Regulation 1 was further amended to require producers of controlled materials to use their customers' program identifications on their rated purchase orders for primary nickel needed to fill defense orders for controlled materials. This action was taken because of the need for the Government to have full information on the magnitude of defense purchases of nickel for each of the defense programs in order to provide an accurate measure of defense uses. This information is necessary in connection with evaluating the estimates for individual program requirements and for stockpile policy, the effect of expansion of military programs on nickel supply, and similar matters affecting national security. This amendment to DMS Regulation 1 changes the preceding amendment which required the use of the "basket" symbol B–5. Under the revised rule controlled materials producers show the individual program identifications of their customers on their purchase orders for defense uses of nickel. This, in turn, permits nickel suppliers to report to BDSA the quantities charged against each of the program symbols.

(3) Due to the fact that supplies of nickel are sufficient for both civilian and defense needs, amendment 5 to BDSA Regulation 2 and amendment 1 to direction 7 of BDSA Regulation 2 were issued on May 10, 1958. Amendment 5 established the general rule that, wherever possible, all persons who have acquired any materials on priority ratings must use such materials, or the products into which they have been incorporated, to fill other rated orders if they cannot be used for their original purpose, before a nondefense disposition may be made. With respect to nickel, this amendment eliminated the provision requiring both the reporting to BDSA of rated nickel held by consumers in excess of defense needs and authorization from this agency for the use or disposal of such excess for nondefense purposes. The amendment to direction 7 of BDSA Regulation 2 eliminated the reporting requirements theretofore applicable to usable scrap derived from primary nickel acquired with the use of ratings. Owners of such scrap, however, must continue to use it to fill any rated orders on hand before they are free to use or dispose of it otherwise.

Executive reserve program

The National Defense Executive Reserve, authorized by a 1955 amendment to the Defense Production Act of 1950, was established on February 15, 1956, by Executive Order No. 10660. The Business and Defense Services Administration unit of the National Defense Executive Reserve was launched in March 1956. As of September 30, BDSA had selected, cleared for security, and designated over 750 executive reservists. They come primarily from industry and at least 70 percent have had previous experience in administering Government mobilization controls.

Following a reevaluation of its executive reserve program, with particular reference to size, composition, and geographic dispersion of its unit, BDSA is now engaged in expanding its reserve unit to 1,500. Current selection of prospective qualified candidates stresses geographic distribution as well as varied employment affiliations. BDSA's industry divisions are continually engaged in identifying those functional areas which would require the services of reservists in the event of mobilization. With approximately 1,500 reservists, an adequate key staff could be recruited for an emergency production agency under either a nuclear attack situation or hostilities in which no attack on our country is involved, provided that additional reservists are selected primarily to fill out a geographic pattern to give some coverage to each major industry in a region. For the purpose of testing mobilization production plans and for general orientation, each BDSA reservist is being assigned to a specific regional location in addition to his functional assignment with one of the BDSA industry divisions. Which one of these may ultimately become his permanent assignment depends on the nature of the war emergency.

The First National Defense Executive Reserve Conference was held in Washington, D. C., on November 13 and 14, 1957. It was sponsored jointly by the Secretary of Commerce and the Director, Office of Defense Mobilization (now Office of Civil and Defense Mobilization). The purpose of the conference was to bring the reservists up to date on national mobilization policies and problems.

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At the open sessions on the first day, reservists, their employers, and selected Government officials were given an appraisal of the national preparedness position by the Vice President, the Secretary of State, the Secretary of Commerce, the Director of the Office of Defense Mobilization, the Chief of Staff of the United States Army, and a member of the Joint Committee on Defense Production. Also among those participating were the Secretary of Defense, the Director of the Bureau of the Budget, and the Selective Service Director. At the closed session on the second day, over 400 BDSA executive reservists with full security clearance were assigned to appropriate industry divisions for a description of actions taken during Operation Alert 1957 as well as of the data stored at the Agency's relocation center. The final session of the conference was addressed by the President of the United States.

Plans were completed for the active participation and training of all BDSA executive reservists coincidental with the second phase of Operation Alert 1958. For this purpose, 1-day regional orientation sessions were held in mid-July at Atlanta, Boston, Chicago, Cincinnati, Cleveland, Houston, Kansas City, Los Angeles, New York, Philadelphia, Pittsburgh, San Francisco, and Washington, D. C. Some 500 executive reservists and a number of field office managers attended these sessions. The program for each session included, among other things of a more general nature, discussion of (1) background information on the alert exercise as it relates to decentralized operation of an emergency production agency; (2) effect of attack damage on basic industries and remaining inventories; (3) the survival items program; and (4) actions incident to survival. A question-and-answer period followed. Participation by executive reservists at the training sessions far exceeded expectations. Comments received from the reservists indicate that the meetings were both stimulating and provocative. The program material presented at the regional training sessions is being prepared for distribution to all of our reservists.

As a prelude to the regional meetings, reservists were requested to complete a questionnaire designed to assist BDSA in evaluating the effect of attack patterns on its reserve complement and in planning for reserve utilization in the event of emergency. Evaluation revealed the degree of geographic concentration existing and indicated the areas in which additional reservists should be recruited in the interest of dispersion. Aware of the wide range of experience and training among the reservists in handling Government problems, BDSA asked all reservists to participate in a problem exercise. This exercise involved solutions of practical problems and was designed to indoctrinate new reservists as well as to stimulate the flow of ideas among all reservists.

At least once a month news bulletins are sent to all reservists. These bulletins highlight BDSA's current mobilization activities and serve to indoctrinate those reservists who have had no on-the-job experience in administering mobilization controls.

BDSA has continued to furnish its reservists certain training aids. The most valuable of these have been the Annual Report of the Joint Committee on Defense Production and the pamphlet, Defense Mobilization Organization. These are routinely furnished reservists as soon as they are officially designated by the Secretary of Commerce.

Operation Alert 1958

The purpose of Operation Alert 1958 was to examine the readiness of the Nation at local, State, and National levels to meet a direct nuclear attack on the United States. The exercise was conducted in three phases, as follows: (1) the attack phase, May 6–7; (2) the Federal action phase, July 14–18; and the evaluation phase, September 15–17.

During the attack phase, State and local civil-defense organizations analyzed the impact of the simulated attack and determined their ability to cope with the situation. In the period between May 7 and July 14, the local area reports were consolidated at the State level and submitted to the respective eight regional headquarters for analysis and review. During the first 2 days of the Federal action phase the 8 regions operated autonomously making decisions and taking actions required to solve their problems utilizing only their own resources. National relocation sites became operative on July 16, to advise and assist the regions in solving their problems and to consider national problems arising from the exercise.

BDSA, as the OPAL industrial production agency, participated in the attack phase through designated field-office managers who observed and rendered assistance as required at the eight OCDM regional relocation sites. Also, during this

phase the 33 BDSA field offices were surveyed as to their state of readiness and operational capability after attack.

A major activity of BDSA for a number of weeks following the attack phase was the development of data on supply and productive capacity remaining "after attack" for some 50 survival items. Data were developed for each of the eight regions for each item and were made available to regional production offices and to OCDM prior to the Federal action phase. Basic data used in the calculations were considerably more reliable than in Operation Alert 1957 as a result of activity during the year on the survival items statistical program.

During the Federal action phase, designated field office managers represented the industrial production agency at the eight regional relocation sites, supplied information and advice concerning availability of survival items and functioned as members of the regional advisory councils and regional resources boards. The BDSA national relocation site was in operation July 16–18 staffed by a small group of key officials. A majority of headquarters personnel participated in the exercise in the preparation of supply and production data and in the solving of other problems related to the production area. The exercise provided much valuable experience to headquarters personnel and especially to field office personnel, inasmuch as regional activity had not been stressed in previous exercises.

Industry evaluation board

The primary function of the Industry Evaluation Board, established in 1951 under NSC directive, is to identify those relatively few products and services, and their producing facilities, which are of such exceptional importance to national defense, including civil defense and an essential civilian economy, that they constitute the base upon which production for defense depends. The documents, covering the Board's findings, are currently distributed to a limited but increasing number of users among the various Federal agencies whose need for them has been established to the satisfaction of the Director of the Office of Civil and Defense Mobilization. These documents are also available at a number of relocation sites.

The past year showed a marked increase in and broadening of the applications of Industry Evaluation Board analyses, and additional developments in new areas are anticipated for the coming year because of the new military concepts, changing weapons design, increasing emphasis on civil defense, and consequent modifications in concepts of mobilization readiness. Considerable attention has been given and will continue to be given to a reexamination of the principles and policies of the Board in the light of these changing concepts.

Industry Evaluation Board actions completed during the past 12 months produced new or revised analyses of a number of the most critical and basic segments of American industry, including areas in the electronics, chemicals, metal cutting machine tools, aluminum, ferrous alloys, iron and steel, and other essential metals and minerals industries. A new user of IEB materials was also added to the limited number authorized by the Director of OCDM.

Also, during the year beginning October 1, 1957, the IEB data which have been included in the magnetic-tape records of the national damage assessment program were revised and augmented. These data, covering thousands of facilities for the communications, transportation, and power distribution services, as well as manufacturing and industrial facilities, are widely used among Federal agencies, designated by the Director of OCDM, for Operations Alert and other mobilization and defense planning activities. The task of placing the high-speed computer magnetic-tape records of IEB information on a current basis necessitated a complete review of all print-out materials on more than 3,500 manufacturing facilities, and required revisions of existing data as well as the addition of new information not previously integrated in the records.

Industrial defense

The problem of the continuity, or restoration, of production following a massive nuclear attack is extremely complex. For the past 6 or 7 years, various aspects of this problem have received thoughtful consideration by several Federal agencies, including the Department of Commerce. These agencies have developed programs in cooperation with industry in an endeavor to improve our national posture with respect to continuity of production. The Department has to date been active in attempting to find solutions to the many facets of the problem. Our comments, therefore, reflect our own experience with a number of major industrial concerns who are participating in our industrial defense program.

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The industrial defense program has kept continuity of production as a major objective, but in the actual development of its program only certain phases have been stressed. These phases are continuity of management and records protection. Obviously, these are vital to the restoration of production after an attack, but other equally important steps have not been taken. Some of these would have required a substantial expenditure of funds. Rapid developments in nuclear weapons and their effects have discouraged such investment through threatened obsolescence.

In addition, a basic question has arisen as a result of the way in which the problem of industrial survival has been approached. In view of existing legislation and delegations because of the fundamental nature of the problem, the responsibilities and activities of the Office of Civil and Defense Mobilization are of a broad nature, involving most segments of our national life, industrial and otherwise. Agencies such as the Departments of Defense, Commerce, and Interior, however, dealing with the production chain, inevitably have to approach the problem on an industry-by-industry and company-by-company basis.

The problem this generates is illustrated by the survival of the labor force without which there would be no continuity of production. Except during the workday at the plant, the labor force is part of the general population whose survival is the responsibility of the OCDM. Any program aiming at continuity of production obviously must include the preservation of the labor force.

It is anticipated that revised policy guidance will be provided by the newly established Office of Civil and Defense Administration in the near future, which will enable BDSA to conduct extensive work on this program during the current fiscal year.

Stockpile activities

The major development in the stockpiling of strategic and critical materials during the past year has been the important revision of stockpiling policy, established by the Office of Defense Mobilization on June 30, 1958, as Defense Mobilization Order V–7. This revision was based in part on the report, Stockpiling for Defense in the Nuclear Age, prepared by the Special Stockpile Advisory Committee under the chairmanship of Mr. H. D. Pettibone and in part on advice from the various governmental agencies concerned.

Changes affecting particularly the operations of the Department in this area included revised methods of estimating mobilization requirements, new criteria for upgrading materials already in the stockpile, development of mobilization requirements for high-heat alloys and special-property materials where there are indications of reasonably firm needs in time of war, and limiting stockpile objectives to meet shortages which would arise in a 3-year war period instead of a 5-year war period.

The burden of work resulting from these changes will increase stockpiling activities in the Department to a new peak, since all requirements and supply estimates should be revised in accordance with the new policy and supply-requirements balances of many special-property materials not now being stockpiled will have to be examined. In light of this prospect it has been necessary to allocate carefully the available manpower for the coming year so as to carry out to a maximum degree the Department's responsibilities in this field.

The 4- or 5-month period during which stockpiling policies were reviewed and concurrent indications of a change in war planning required a suspension of many basic data studies which served to slow down the usual output of work during the past year. Estimates of mobilization requirements became necessarily uncertain, particularly for those materials largely consumed in the production of war material, and only requirements for those items used primarily in essential civilian and war-supporting operations could be developed with some degree of assurance. However, in the year under consideration there were a number of significant accomplishments.

Estimates of supply and requirements.—The Business and Defense Services Administration has been delegated responsibility for estimating essential civilian and war-supporting mobilization requirements for most materials being stockpiled, as well as for estimating wartime supplies of certain materials which are stockpiled in advanced forms. With the inclusion of estimates of direct defense needs submitted to the Office of Civil and Defense Mobilization by the Department of Defense, and when related to estimates of mobilization supply from Commerce and other agencies, the estimates form the basis for establishment of stockpile objectives by OCDM. In contributing to this work, BDSA has completed or assisted in the completion of mobilization supply and/or requirements studies for the following materials:

Abaca	Small diamond dies
Artificial graphite	Sisal
Copper	Titanium
Manganese, metallurgical grade	Vegetable tanning extracts
Magnesium	

Studies of mobilization supply and/or requirements have been undertaken for additional materials as follows:

Aluminum	Manganese ore, chemical grade
Bauxite	Manganese ore, metallurgical grade
Cryolite	Mercury
Diamond dies	Rubber
Diamond stones	Selenium
Diamond crushing bort	Silk, raw
Fluorspar, acid grade	Silk, waste and noils
Fluorspar, metallurgical grade	Tantalum
Hydrofluoric acid	

Stockpile purchase specifications.—Materials in the stockpile must be in a form which provides for efficient utilization in time of war. Industry advice in this respect is essential and appropriate purchase specifications are developed with the assistance of both producers and consumers. In accordance with requests from ODM and its successor OCDM the need for revising purchase and acceptance specifications for the materials listed below has been discussed with industry and recommendations regarding them submitted to ODM or OCDM.

Copper billets	Manganese dioxide, battery grade
Ferrochrome, high carbon	Manganese ore, chemical grade
Ferrochrome, low carbon	Manganese ore, metallurgical grade
Ferrochrome silicon, low carbon	Mercury
Ferromolybdenum	Molybdenum disulphide
Ferrotantalum-columbium	Molybdenum oxide
Ferrotungsten	Selenium
Ferrovanadium	Shellac
Graphite-ceylon, amorphous lump	
Graphite-madagascar, crystalline flakes and fines	

Storage procedures.—Stockpile materials should be stored in a manner to prevent deterioration over prolonged periods. Pursuant to requests by ODM (OCDM) and GSA, comment on storage practices for the following commodities was forwarded to ODM (OCDM). When required, industry advice was obtained in the preparation of recommendations.

Aluminum	Magnesium
Antimony	Quinidine
Abaca	Quinine
Castor oil	Palm oil
Coconut oil	Silk, raw
Chrome metal	Silk, waste and noils
Cotton, extra long staple	Sperm oil
Copper	Sisal
Ferrochrome, low carbon	Nickel
Ferrotantalum-columbium	Totaquine
Hyoscine	Zinc
Lead	Tungsten concentrates

Special studies and recommendations regarding stockpile materials and strategic material problems

Abaca and sisal.—With the assistance of a task group, the feasibility of extending the rotational period of abaca and sisal and related problems were studied. Experience with abaca showed that an extension of 20 percent of the rotational period would be possible, thus permitting an increase in the stockpile inventory by that amount and thereby eliminating the uncovered deficit.

Copper.—A special feasibility study covering supply and demand for refined copper and copper base scrap including scrap generation was completed.

Diamond dies (small).—An interim purchase program for unmounted diamond dies, based on a review of the diamond die situation, had been submitted to ODM and had been approved. Late in December 1957, bids were requested of

industry by GSA. Because of the unsatisfactory response from domestic industry, BDS9 consulted again with diamond die producers and diamond die wire drawers regarding a feasible program in this area. Essentially the problem involved a strong preference by domestic producers to supply mounted dies and the difficulty of adequate inspection of dies after being mounted. In this respect, new evidence indicated that methods of inspecting mounted dies could be used satisfactorily and that stockpiling of mounted dies generally would be acceptable to users. As a result a new purchase program under consideration. Meanwhile, capacity for mobilization production and mobilization requirements is being reevaluated with a mounted and unmounted diamond die program in mind.

Hard fiber cordage.—At the request of the Cordage Institute, the Office of Defense Mobilization examined possible impairment of our security resulting from large imports of hard fiber cordage. To assist ODM in its consideration of the problem BDSA made an analysis of domestic production of sisal and abaca, cordage imports, and mobilization requirements for those items. The study included a review of essential civilan and war-supporting requirements, present and prospective domestic cordage capacity and a comparison of recent cordage production with imports in the four major cordage categories: Rope, baler twine, binder twine, and industrial twine.

Essentially the problem stemmed from decreasing domestic baler twine production in the face of increasing imports of this product. In the light of the general interchangeability of rope and baler twine production ODM was required to consider the extent to which the total domestic cordage capacity might be affected by this development and the relationship of existing and prospective capacity to potential production in time of war and stockpile inventories.

Helium.—A special survey was made of the usage and essentiality of helium for defense and industrial purposes, including an evaluation of estimates of potential growth in demand for the foreseeable future. This survey in conjunction with other studies was considered in determining how much the production of helium should be expanded, to what extent it should be conserved, and what program would be appropriate to meet these requirements.

Kyanite.—Early in 1954 kyanite was removed from the list of strategic and critical materials being stockpiled because of the development of an effective substitute, synthetic mullite, and an increase in domestic sources of supply. BDSA participated in the preparation of a recommendation that the inventory of Indian kyanite be restored to a stockpile status, because it was superior to other kyanite and synthetic mullite for certain special uses.

Nickel.—As recommended by BDSA the Office of Defense Mobilization authorized the diversion to industry of all nickel scheduled for delivery to the Government in 1957 and 1958. Essentially all nickel diverted through the third quarter of 1957 was sold to industry. However, as a result of a sharply lowered demand for nickel in the fourth quarter almost all the premium price nickel and substantial quantities of the Nicaro nickel oxide sinter and nickel metal has remained unsold through the third quarter of 1958.

Following a recommendation by BDSA, ODM instructed the General Services Administration to retain the unsold nickel in the Defense Production Act inventory for possible resale to industry in the event of a renewed demand.

Opium and quinidine.—Statistics on world production, domestic production, and domestic consumption of opium and quinidine were assembled for use in preparation of basic data sheets covering the mobilization supply and requirements of these materials.

Survey of ferroalloy industry.—A comprehensive survey of the ferroalloy industry was made in 1957 with a view to determining the extent to which producers of six basic ferroalloys—manganese, silicon, chromium, tungsten, molybdenum, and vanadium—could change from one product to another. The feasibility of alternative production became an important factor in refining estimates of mobilization deficits. During the second quarter of 1958 this study was brought up-to-date in reflecting the addition of new facilities. In light of the findings evaluation of the relative essentiality of the new facilities was continued.

Tantalum—BDSA conducted a survey of the present and prospective industrial capacity to produce tantalum metal. The information so obtained will be used in preparation of estimates of supply during a mobilization period.

Titanium.—A survey of commercial and military requirements of titanium common components was completed and sent to ODM.

Upgrading of stockpile materials.—Several studies were made regarding the need to upgrade materials now in the stockpile so as to provide a mobilization reserve of material in advanced form ready for immediate use adjacent to points of consumption. Recommendations on urgent cases were submitted to ODM.

MACHINE TOOLS

Administration of order M–41

During March 1958, the BDSA, in cooperation with the Department of Defense, prepared and issued a new numerical preference list to provide the most recent priority requirements of the military agencies for missile production. In June 1958, supplement 1 to the new list was prepared and submitted to approximately 400 machine tool builders and DOD.

Management of defense mobilization production equipment inventory

During the year, a detailed review was made of the General Services Administration segment of the defense mobilization production equipment inventory and the inventory records revised accordingly. During the period, GSA added 87 machine tool items to the inventory and withdrew 15 items. As of September 30, 1958, the GSA segment contained 575 items having an acquisition value of $9,370,812.

During the period there were 8 deletions valued at $525,055 from the Atomic Energy Commission segment of the inventory leaving the inventory at 52 items with acquisition value of $2,146,773.

There were no changes in the Maritime Administration segment which contains 958 items valued at $2,853,817. Discussions have been underway with the Maritime Administration concerning the status of their inventory of machine tools and a decision will be arrived at in the near future to determine the extent that the inventory falls within the DMPEI.

M-day machine tool trigger program

The first phase of the M-day machine tool trigger program has been completed. As of September 1958, 92 machine tool builders have agreed to participate in the program and have signed their contracts covering approximately 15,400 general purpose machine tools having an estimated value of $235 million.

Management of facilities expansion program

The Korean pool order program.—During the year this program was reviewed with GSA to determine the disposition of the 397 items remaining unsold. On the basis of these discussions the BDSA recommended that: (*a*) 196 items be transferred to DMPEI; (*b*) 131 items be declared excess and sold; and (*c*) 70 items, having potential mobilization and industry utility, be transferred to some other program in order to facilitate the termination of the Korean pool order program. On the basis of these discussions and BDSA recommendations, the GSA will advise the machine tool builders that their sale and storage agreements will not be extended beyond their present termination date.

Facilities lease contracts program.—During the past year the BDSA continued its efforts to close out the facilities lease contracts program. The GSA, in accordance with the recommendations of BDSA, terminated 25 contracts, involving 216 items, and BDSA has recommended the termination of 15 other contracts covering 153 items. At the close of the period, 9 contracts remain in active status. These contracts will be closed out and the lessees will be given the opportunity to purchase the equipment at the time of their termination dates. These 9 contracts include 2 which were extended because of hardship conditions that would have resulted from their termination.

MACHINE TOOL PROGRAM

Government inventory of machine tools and related production equipment

The Government inventory of machine tools and related production equipment has played a vital role in the mobilization activities of the Nation during past national emergencies. In view of the importance of this inventory, the Joint Committee on Defense Production in its seventh annual report deemed it desirable to caution the Department of Defense to "take proper safeguards" in reviewing its future military programs to determine what portion of its idle reserves of machine tools should be classified as surplus. (Recommendation No. 10, p. 5, Seventh Annual Report of the Activities of the Joint Committee on Defense Production.)

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During the past year, anticipating enlarged disposal activities of the armed services resulting from the new strategic concepts and economic considerations, BDSA developed two programs that had for their objective the use of the machine tools declared excess by the armed services in the survival, rehabilitation and educational training programs of the Nation.

BDSA has held discussions with representatives of the Department of Health, Education, and Welfare and the General Services Administration to develop administrative procedures to improve the flow of surplus Government-owned production equipment into the educational institutions of the Nation. As a result a procedure has been established commencing July 1, 1958, under which GSA will provide HEW with "firm listings" of the surplus machine tools available to meet the school needs. These listings will assist HEW in carrying out its responsibility of "equitable distribution" of the surplus items to the Nation's schools.

On May 1, 1958, HEW requested the State surplus property agents to submit their educational requirements not later than June 1, 1958. These requirements are currently under review.

During the past year, BDSA reviewed numerous listings of machine tools determined to be excess to the needs of the military departments and made recommendations to DOD for disposition of the items listed. Approximately 80 percent of the items were found to be unsuitable for retention as part of the Nation's mobilization base and DOD was advised that they could be sold without adverse impact on the machine tool industry. Approximately 20 percent of the items declared to be excess were recommended to be retained in the national industrial equipment reserve.

Industry teams were established to inspect and evaluate excess machine tools at 2 Government sites and 2 Government-owned industry operated plant sites. These teams recommended that, with but few exceptions, the items were unsuitable for retention in the mobilization base and could be sold without adverse impact on the industry.

During the last quarter of 1957 and the first quarter of 1958, there was a marked increase in the number of cases presented to the BDSA wherein the military departments wished to lease Government-owned production equipment for nondefense purposes. In all such instances, the agency reiterated the position taken previously that alleged savings to the Government did not justify nondefense leasing, that the Government should not compete with private industry, and that such leasing created unfair competitive conditions.

Standby reporting Form BDSAF–417 "Diversion and Directive Reporting Form"

A machine tool task group was convened on September 10, 1957, to review the mobilization status of the reporting Form BDSAF–62 "Metalworking Machines Manufacturer's Order Board" that was used most effectively during the Korean period. The task group recommended that a revised reporting form be developed and tested by representative machine tool builders for its effectiveness to fill mobilization needs. A reporting Form BDSAF–417 "Diversion and Directive Reporting Form" was developed and the Bureau of the Budget approved a field testing procedure.

The field testing took place during the fourth quarter of 1957. On April 3, 1958, the Bureau of the Budget approved Form BDSAF–417 as a form to be held in standby status.

Expansion goals and tax amortization

The Business and Defense Services Administration has continued to act in an advisory capacity to the OCDM in connection with the processing of applications for rapid tax amortization field under Public Law 85–165. Recommendations have been made to the Director of OCDM on a total of nearly 350 cases of which approximately 180 were cases involving postcertification requests for time extensions, amendments, etc. This represents a substantial diminution in the number of cases handled in the past due to the rigid criteria imposed by the Congress in the new statute itself.

Because of the need for revision of the basic rules governing the eligibility of facilities for rapid amortization and the processing of applications filed requesting the privilege, all new cases were held in abeyance until March 1958 when the Director of the then Office of Defense Mobilization issued revised ODM Regulation 1A. Immediately thereafter all existing expansion goals were closed and the processing of cases was begun on a one-of-a-kind basis. BDSA comments on applications are made only when specifically requested by the

Office of Civil and Defense Mobilization and only when in the opinion of the BDSA, the agency is in possession of the specific type of knowledge or data which would contribute to the further consideration of the matter by the certifying office or officer. Applications determined to be small-business cases are cleared, as appropriate, with the Small Business Administration.

Although all expansion goals are now closed and as a consequence the existence of an open expansion goal is no longer a criterion for the approval of a request for rapid amortization, the BDSA is continuing the semiannual survey of holders of certificatess of necessity involving facilities producing products or materials over which BDSA has cognizance. These reports permit a measurement of the industrial expension gained through the amortization program and the progress that has been made toward completion of the expansion goal under which the original certificate of necessity was certified.

Component studies

As of September 1958, the component studies under the jurisdiction of the Interagency Components Committee can be considered completed, subject to review when new requirements become available. Of the 65 studies undertaken, 9 were chaired by the Department of Defense and the remainder by BDSA. The following is a summary of this activity:

Total studies	65
Studies showing no deficiencies	50
Studies showing deficiencies	8
Studies inactive pending new requirements statements	7

Upon the receipt of new requirements information, all studies will be reviewed with special emphasis upon the 8 studies showing deficiencies and the 7 inactive studies.

Export problems

During the past year due to the decrease in industrial production a further relaxation of short supply controls on export was undertaken. In fact, most materials were licensed freely by the end of the second quarter of 1958 but were kept under surveillance by means of open-end quotas.

The materials remaining under short supply control in the period covered were:

Nickel, including scrap.
Diamond bort and powder.
Rerolling and relaying rails.
Salk vaccine.
Iron and steel scrap.

It appears that removal of all controls for short-supply reasons will be effected during the last quarter of 1958.

Bomb-damage-assessment program

The BDSA bomb-damage-assessment program has been concerned with developing assumptions concerning the likely status of national production capability after a nuclear attack on the United States. These assumptions involve the length of time which must elapse after an attack and before blast and fire-damaged plants might be reentered for inspection and for repair or cannibalization; the time when a functioning community around these plants could be reestablished; and the time when the intricate chain of supply and demand affecting these plants could become functional. Involved also are the problems of radiation and fire storms.

Particular emphasis in the program is placed upon "vertical" bomb damage assessment as compared with "horizontal" bomb damage assessment. The vertical assessment takes into account the specific end product of a plant and also the supply of components and the flow of goods and services which must be furnished the plant in order to produce the end product. Illustrations of the difference in production estimates by the vertical and horizontal approaches are cited below, based upon the simulated attack used in Operation Alert 1958:

(1) The only plant manufacturing a particular survival item was in an unhit area, with full labor force, utilities, etc., available, and therefore on a horizontal basis 100 percent of capacity for that item survived. However, when the suppliers of essential materials and components were considered, it was found that so many of them were located in hit cities that even a year after the attack there might still have been no production from that surviving plant beyond an initial runout from existing inventory.

(2) In the case of a key electronics item, it was estimated the production after 1 year for the surviving plants producing that item would have been about 24 percent of preattack capacity, but on a vertical basis it was reduced to no more than 8 percent if inventories surviving the attack were considered, and to zero after the inventories had been exhausted.

(3) For a product depending largely on raw materials like cotton, production, although curtailed severely for 3 months after the attack, had recovered almost fully by the end of a year.

These illustrations show how intricately dependent on the entire national production are the capabilities of individual plants.

There has been established by BDSA a Government-Industry Task Group for studying postattack production under realistic conditions. Agreement has been reached with six participating companies which include antibiotics, surgical instruments, food pack cans, central office dial switching equipment, and a product of the Atomic Energy Commission. The purpose of these pilot studies is to test the fundamental assumptions and the development of a generalized pattern for estimating manufacturing capacity following a mass nuclear attack.

INDUSTRY-GOVERNMENT COOPERATION

Industry conferences, IAC's, and task groups

Pursuant to the Defense Production Act which provides for BDSA consultation with industry, a series of meetings of various types was held during the period October 1, 1957, to September 2, 1958:

Industry advisory committees	9
Special conferences	3
Task groups	19

All meetings were concerned in whole or in part with BDSA's operations under the Defense Production Act, the National Security Act, and related legislation. Matters considered included such subjects as industrial mobilization problems, requirements and capacity data, stockpiling, and mobilization controls. A list of these meetings is presented on pages 38 and 39 of this report.

Field service activities

Field offices located in 33 cities provide local points of contact between BDSA and the business public on all matters relating to current programs. Working closely with defense procurement offices as well as prime and subcontractors, the field offices act as BDSA outposts in keeping them informed and providing assistance on the policies, regulations, directives, and delegations of the parent agency.

Special efforts were made during the year to place the field offices in a position to function without delay in the event of an emergency. Orders, instructions, and delegations have been prepared and plans made for carrying out the agency's responsibilities under various assumptions and conditions.

In close cooperation with the regional representatives of the Office of Civil and Defense Mobilization, and other Government agencies, the field offices have participated in mobilization planning meetings and exercises throughout the year. These contacts provide for field coordination and cooperation paralleling the activities carried on at central headquarters between the various agencies with defense mobilization responsibilities. Serving on regional boards the BDSA representative is enabled to act on behalf of the agency on matters of mutual interest to the Government units involved. This activity will be further increased during the remainder of this fiscal year.

INDUSTRY ADVISORY COMMITTEE MEETINGS

IAC meetings:		
1957	Oct. 22	Fluid power.
	Oct. 28	Commercial central station protective signaling.
	Dec. 5	Titanium producers and fabricators.
	Dec. 11	Truck body manufacturers.
1958	Mar. 13	Open die press and hammer forging.
	Apr. 2	Industrial power truck manufacturers.
	May 2	Mining machinery.
	May 13	Diesel engine manufacturers.
	Aug. 19	Diesel engine manufacturers.
Special conferences:		
1958	Mar. 19	Special conference on C–46 aircraft surplus market impact.
	Mar. 27	Special conference on titanium sponge.
	Apr. 1	Special conference of fine wire drawing industry (consumers of small-size diamond dies).
Task groups:		
1957	Oct. 9	To develop problems of air-conditioning policy.
	Oct. 15	Mobilization controls.
	Nov. 6	Diamond dies.
	Nov. 18	Jigs and fixtures.
	Nov. 18	To determine material consumption and production of fluid-power industry.
1958	Jan. 10	Task Group on Critical Signaling Facilities for National Defense.
	Jan. 29	Task Group on Mobilization Controls (Electrical Equipment Division).
	Jan. 30	Task Group on Antifriction Bearings.
	Feb. 11	Task Group To Determine Most Critical Signaling Facilities Relating to National Defense.
	Feb. 14	Domestic Communications Operating IAC Task Group.
	Feb. 18	Task Group on Mobilization Controls (Iron and Steel Division).
	Mar. 6	Task Group To Discuss Mobilization Matters Affecting Nickel Alloys and Their Distribution (Miscellaneous Metals and Minerals Division).
	Mar. 12	Task Group (Joint—Electronics and Electrical) To Develop Categories to be Used To Collect Requirements and Capacity Data.
	Apr. 22	Task Group To Develop Engineering Standards and Criteria on Government Practice (air conditioning).
	May 12	Open Die Press and Hammer Forging Task Group.
	May 15	Task Group To Study Rotation of Sisalana and Abaca Stockpile and Related Problems.
	June 19	Task Group To Study Problems of Communications Under Attack.
	July 29	Task Group on Materials Consumption and Production of Fluid Power.
	Aug. 26	Task Group on Economic Impact of Surplus Ship Disposal (diesel engines).

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CHANGES IN MOBILIZATION PLANNING AND READINESS MEASURES TO MEET FUTURE EMERGENCIES

In our previous annual report to the Joint Committee on Defense Production, we noted in considerable detail the various changes in our mobilization planning activities which had been undertaken or were planned by the Business and Defense Services Administration. Such actual or planned changes in activities were necessitated by the acquisition of more specific information concerning weapons and weapons systems which posed new and intensified threats to the Nation. We indicated that our main concern for an indefinite period would be to design emergency plans which would assure firm direction to the industrial community and provide for the maximum utilization of the industrial plant in meeting the needs of the surviving population and provide for the rehabilitation of the Nation. The various foregoing segments of this report indicate how extensively our proposed changes have been augmented by action within the Agency, and it would appear advisable to review briefly the direction in which these activities are moving and outline such additional changes as are warranted under existing national and international circumstances.

We have undertaken a revision of the Defense Materials System (which is designed to channel controlled materials to the support of military and Atomic Energy programs) and will during this fiscal year obtain the recommendations of all interested agencies and representatives of the major affected industries. The review of the Defense Materials System will be for the purpose of determining the advisability of further simplification, accuracy of information concerning military and Atomic Energy Commission requirements and such revisions as may be warranted so as to permit a greater adaptability in meeting emergency needs.

We have, as has been pointed out previously, expanded the National Defense Executive Reserve program of the Agency to permit a greater degree of utility and flexibility of such personnel during an emergency period. Executive reservists have been informed through the various training sessions of the probability of a high degree of regional autonomy and of the potential assignment to regional locations rather than at the national level. To accomplish such a regionalized organization it will of course be necessary to furnish to each of the regions the basic industrial data which is currently available only in Washington and at the Administration's national relocation center. The expansion of the Executive Reserve to the authorized complement of 1,500, the training of the Executive reservists for the tasks with which they will be confronted, the organization of the Reserve into a cohesive and effective operating team and the dispersion to selected regional locations of the industrial records is a task of considerable proportion and will occupy an important part of the Agency's program in the future.

While a great deal of time and effort has been expended on the survival-items program throughout the entire executive establishment, the measurement of the potential availability of survival items during the postattack period represents a statistical program of considerable magnitude and complexity. We are well on the way toward the completion of the statistical efforts relating to the manufacturers' or producers' capacity to produce and inventory of survival items and are moving at the present time into the areas of wholesale and retail inventories. These programs, together with the measurement in selected instances of household inventories, is a long-range project of the Agency, working in close collaboration with the Office of Civil and Defense Mobilization and other interested executive departments. During fiscal year 1958 only limited funds were available for this task. However, the funds made available by the Congress for fiscal year 1959 will permit a considerable amount of work to be undertaken and completed. As additional knowledge is obtained by the National Government with respect to survival needs, the survival items list may be expanded to include items not at this time listed and as a consequence the statistical studies of this Agency will be broadened to cover such items at all levels of inventory and production.

On the basis of the guides furnished to us by the National Damage Assessment Center of the OCDM, we are undertaking preliminary studies in the field of copper, steel, and aluminum in order to ascertain not only the potential availability of such basic materials in a postattack period but to ascertain what might be done to alleviate potential shortages, to shorten production time, to provide for maximum substitution in case such action is necessary, and to ascertain what preattack activities can be undertaken in order to assure an adequate supply of such materials in a postattack period. It is anticipated that during the coming year we will consult frequently with industry in order to assist in the conduct of this important work.

The emphasis of the industrial defense program has been changed not only to include a substantially greater number of companies, with heavy emphasis being placed on those companies engaged in the production of survival items, but with primary emphasis upon measures designed to protect and provide for the survival of the labor force and with a long-range view to eventual reestablishment of essential industries. To accomplish this result there will exist a much closer degree of cooperative activities between the OCDM and the staff and industry divisions of the Business and Defense Services Administration and, in addition, a high degree of collaboration with private groups and associations which have indicated their desire to cooperate with the National Government in this important function. The merger of ODM and FCDA into the Office of Civil and Defense Mobilization will permit in the future a much closer degree of cooperation between this Agency and the new OCDM than was possible in the past.

As we proceed toward the completion of our studies of the measurements of survival items and essential supporting services, we will expand the identification and rating of the key industrial facilities engaged in the production of such items and the furnishing of the services. This activity, moving forward as a project of our industrial defense and survival items program, will permit a cohesive program and planning project covering a vast number of producers not heretofore considered, identified, and rated as essential to the national defense.

An important mobilization planning program moving forward concurrently with those noted in this report relates to those studies dealing with the interdependence of our national production units and the difficulties which could be encountered by industry in a postattack period. We have tested a number of products by examining the chain of production needed to support the manufacture of end items and expect to move forward extensively in this field in the future. This activity, which is costly and complex, must, of necessity, depend upon the complete cooperation of industry in order to assure sound accomplishment. We are, therefore, organizing a working group from industry in order to assist us in this task. The cooperation we have received from a number of producers of certain items is worthy of particular commendation.

A short time ago, BDSA completed revising the levels of industrial production needed to meet military and essential civilian activities during the period of a conflict not involving an attack on the United States. As soon as the information concerning the total national controlled material requirements for a so-called limited war are available, BDSA will begin studies and submit to the OCDM basic data sheets on all stockpile materials. Obviously, revisions in the plans of the Department of Defense make a continuous revision of stockpile levels mandatory. The size of the national stockpile and its potential effects upon the national economy make such review essential as does the need for and the effects of diversion from industry of proposed additions to the stockpile. Our studies of stockpile materials will include an intensified program of the effects of technological changes upon the character and type of stockpile materials.

As will be noted from this report, the direction of our mobilization planning is guided by two possible situations. One situation envisages an attack upon the continental United States and the other presumes an armed conflict involving our military forces without an attack on the United States. To assure the maximum effectiveness of our national industrial defense posture we believe it imperative to so design our actions as to assure as closely as possible the maximum effectiveness of our plans under whatever circumstances might face the Nation. We do not in all of our mobilization planning activities ignore the fact that we are in addition faced with threats of economic warfare on an ever-increasing scale and the strength of our industrial might must be maintained irrespective of international events whether of a warlike or economic nature.

Office of Area Development

I. Office of Area Development Authority for Activities Under the Defense Production Act

The responsibilities and activities of the Office of Area Development under the Defense Production Act stem from a delegation to the Department of Commerce from the Office of Defense Mobilization (now Office of Civil and Defense Mobilization).

Under Defense Mobilization Order I–19, January 11, 1956, the Department of Commerce (Office of Area Development) was assigned the responsibility for providing guidance and assistance to departments and agencies of the Federal Government, to industry, public and private persons, and organizations in the application of the dispersion policy.

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II. SUMMARY OF THE NATIONAL INDUSTRIAL DISPERSION PROGRAM

Background.—Following the Korean attack in 1950, it was decided to expand and build up our industrial capacity to meet anticipated mobilization demands. Inevitably, concern arose over the fact that new production facilities might be so located as to make our existing target areas even more attractive to enemy attack. Accordingly, a policy was adopted that, whenever possible, these new defense and defense-supporting facilities would be located far enough away from the major population and industrial concentration so as to be relatively secure from the effects of an attack.

This original dispersion policy was announced by the President on August 10, 1951. Under the policy, local committees were established to make industrial dispersion surveys and to help advise industry on suitable locations within the marketing areas of the various target cities. Suitably dispersed locations were regarded as those at least 10 miles from the periphery of any critical target or target area. The policy did not call for the relocation of existing facilities; only the dispersed location of new or expanded facilities. Needless to say, it was not wholeheartedly accepted by potential target cities, since in many instances it meant that new defense facilities would be located outside the cities' taxable areas.

Defense Mobilization Order I–19.—By 1956, new developments in weapons technology made it clear that the 10-mile rule was no longer adequate. Accordingly, on January 11, 1956, a revised policy was issued in Defense Mobilization Order I–19. This policy recognized a variety of factors which must be considered in determining the appropriate distance which a facility should be from a target area, including the size and importance of the target; the size of weapon likely to be used against it; the characteristics of the proposed facility including protective construction; and the economic, operational, and administrative requirements in carrying out the function for which the facility is to be provided.

In the middle of the year, the Congress, in effect, endorsed the national dispersion policy by adding to the Defense Production Act the following paragraph:

"In order to insure productive capacity in the event of such an atack on the United States, it is the policy of the Congress to encourage the geographical dispersal of the industrial facilities of the United States in the interest of the national defense, and to discourage the concentration of such productive facilities within limited geographical areas which are vulnerable to atack by an enemy of the United States. In the construction of any Government-owned industrial facilities, in the rendition of any Government financial assistance for the construction, expansion, or improvement of any industrial facilities, and in the procurement of goods and services, under this or any other act, each department and agency of the executive branch shall apply, under the coordination of the Office of Defense Mobilization, when practicable and consistent with existing law and the desirability for maintaining a sound economy, the principle of the geographical dispersal of such facilities in the interest of national defense. Nothing contained in this paragraph shall preclude the use of existing industrial facilities."

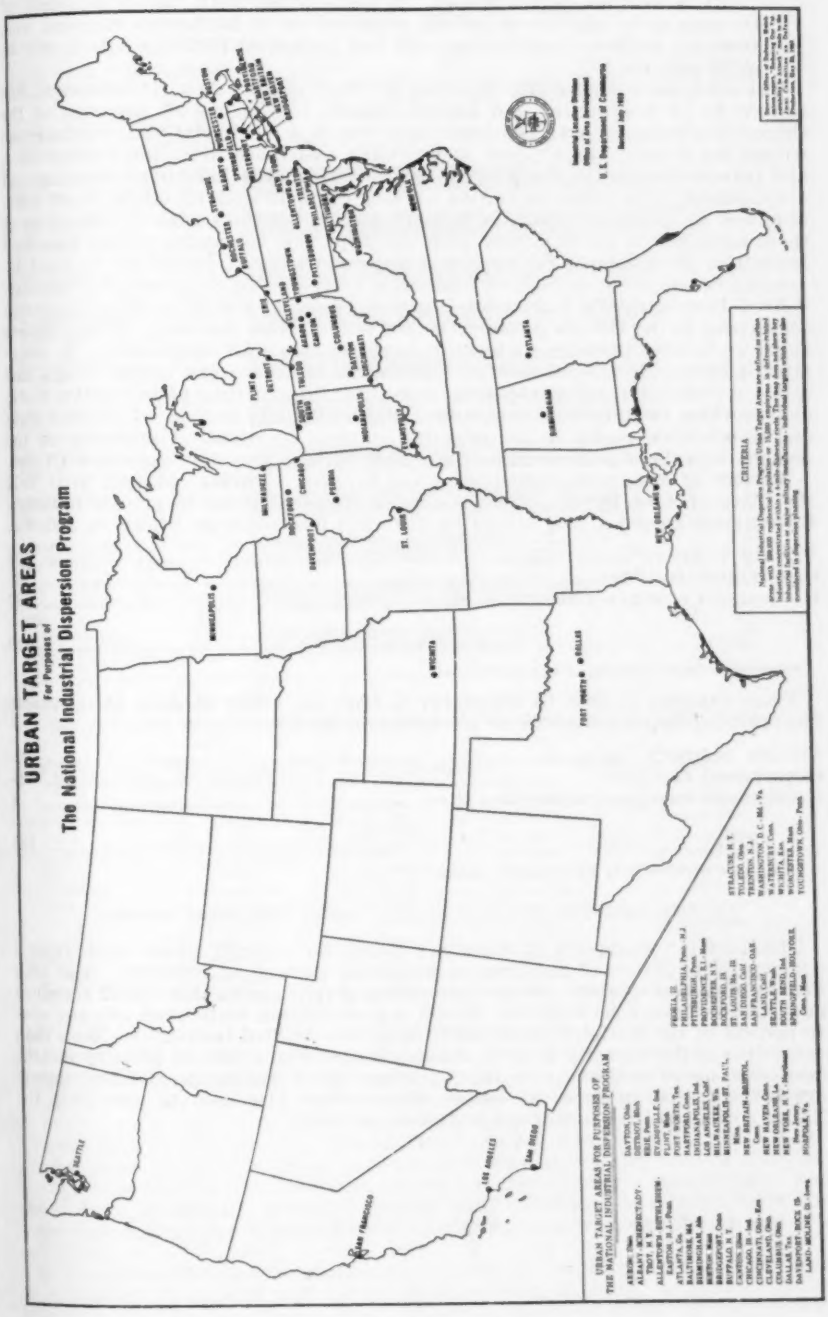
III. OFFICE OF AREA DEVELOPMENT DISPERSION COUNSELING UNDER DMO I–19

In its responsibility for counseling Federal agencies, private industry, and others under DMO I–19, the objective of the Office of Area Development has been to secure the greatest relative security of location within the particular local market area under consideration. This approach permits the natural functioning and growth of urban market areas and does not force regional decentralization. In order to accomplish this objective, the Office of Area Development advises on the dispersion adequacy of specific sites from population and industrial concentrations, and obtain a further determination from the Department of Defense of the dispersion adequacy of specific sites from major military installations and key industrial facilities.

Under the present policy, the distance of a new facility from potential target and destruction areas is still regarded as a major factor in reducing the risk of attack damage to such facility. The determination of an appropriate dispersal distance affording the greatest degree of relative safety is decided on a case-by-case basis, with due consideration given to the various factors referred to above.

In order to accomplish the above objective, the Office of Area Development has established procedures whereby manufacturers and others can obtain a convenient "one-stop" advisory service which includes:

(1) Data on the relationship of specific sites to urban target areas (see accompanying map) as defined under the criteria of the program;



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(2) A determination in the case of a target city, of an appropriate dispersal distance affording the greatest degree of relative security;

(3) A further determination, in cooperation with the Department of Defense, as to whether or not the proposed site is far enough removed from strategic military installations and key industrial facilities which may be in the vicinity.

The dispersion counseling function of the Office of Area Development has proven to be a practical and logical adjunct to the overall program of the Office. The Office of Area Development serves as a focal point and clearinghouse within the Federal Government in providing assistance to States, communities, and private groups for the purpose of promoting area industrial planning and development. The Office maintains working contacts with all official State planning and development agencies; it holds annual meetings with the directors of these agencies; it works closely with the dispersion committee of the American Industrial Development Council; and it provides direct assistance to local industrial development groups, city planning officials, and chambers of commerce.

Area Development's Industrial Location Division, which handles dispersion counseling, is the Office's primary contact with private industry. This Division is set up to help industry on location problems from all standpoints. It maintains industrial locational data on regions, States, and areas, assists utility and railroad companies and management consulting firms in their plant location work, and provides to interested companies and individuals sources of Federal data and information useful in the selection of plant locations. Counseling on the security aspects of plant location fits well into these area development activities.

Number of dispersion counseling cases handled.—During calendar year 1957 the Office of Area Development provided dispersion advice to private industry, Government agencies, and others on 219 sites located in 38 States as follows:

Private industry [1]	98
Government facilities	35
Government emergency relocation sites	86
Total	219

[1] Includes 29 certificate of necessity cases.

From January 1, 1958, to September 1, 1958, the Office of Area Development has provided dispersion advice on 135 sites as follows:

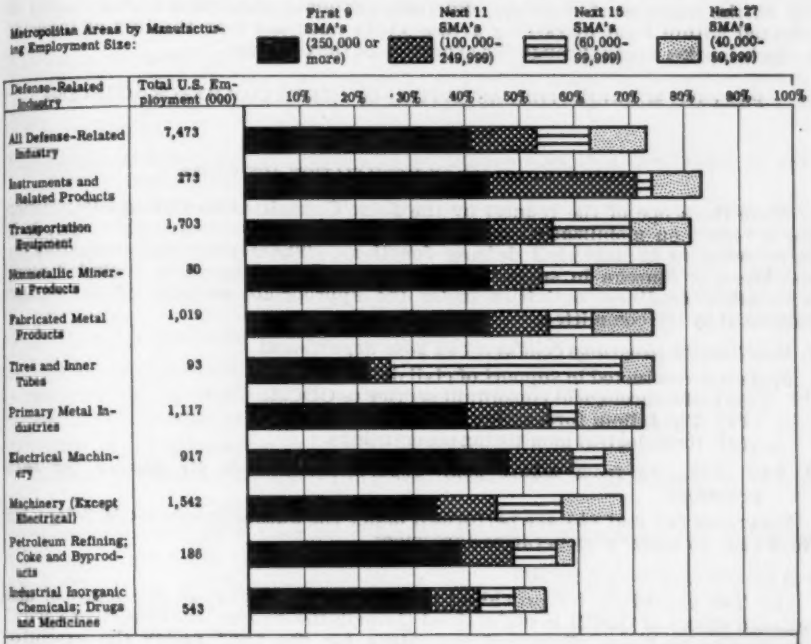
Private industry [1]	87
Government facilities	44
Government emergency relocation sites	4
Total	135

[1] Includes 6 certificate of necessity cases.

IV. THE NEED FOR A NATIONAL INDUSTRIAL DISPERSION PROGRAM

The need for dispersion of America's industrial capacity can be seen from a cursory examination of the present locational pattern of industry. The 1954 Census of Manufacturers (see accompanying graph) shows that the 62 standard metropolitan areas having over 40,000 manufacturing employees contain over 70 percent of the Nation's employment in defense-related industries. More than two-thirds of the capacity in tires, nonmetallic mineral products, primary metals, fabricated metal products, machinery, transportation equipment, and instruments are concentrated in these 62 cities. These cities also contain over half the Nation's capacity in chemical and petroleum products.

CONCENTRATION OF DEFENSE-RELATED INDUSTRIES IN THE 62 STANDARD METROPOLITAN AREAS WITH 40,000 OR MORE MANUFACTURING EMPLOYEES, 1954


Metropolitan Areas by Manufacturing Employment Size:
First 9 SMA's (250,000 or more)
Next 11 SMA's (100,000-249,999)
Next 15 SMA's (60,000-99,999)
Next 27 SMA's (40,000-59,999)
Defense-Related Industry
Total U.S. Employment (000)
10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
All Defense-Related Industry 7,473
Instruments and Related Products 273
Transportation Equipment 1,703
Nonmetallic Mineral Products 80
Fabricated Metal Products 1,019
Tires and Inner Tubes 93
Primary Metal Industries 1,117
Electrical Machinery 917
Machinery (Except Electrical) 1,542
Petroleum Refining; Coke and Byproducts 186
Industrial Inorganic Chemicals; Drugs and Medicines 543

MANUFACTURING EMPLOYMENT RANKING OF METROPOLITAN AREAS WITHIN EACH SIZE GROUP

250,000 or more

1. New York-Northeastern New Jersey
2. Chicago
3. Los Angeles-Long Beach
4. Philadelphia
5. Detroit
6. Pittsburgh
7. Cleveland
8. Boston
9. St. Louis

100,000-249,999

10. Buffalo
11. Baltimore
12. Milwaukee
13. San Francisco-Oakland
14. Cincinnati
15. Minneapolis-St. Paul
16. Providence
17. Kansas City
18. Rochester
19. Youngstown
20. Indianapolis
21. Dayton
22. Allentown-Bethlehem-Easton
23. Akron
24. Louisville
25. Atlanta
26. Seattle
27. Houston
28. Hartford
29. Flint
30. Springfield-Holyoke
31. Columbus
32. Dallas
33. Albany-Schenectady-Troy
34. Bridgeport
35. Toledo

60,000-99,999

36. Birmingham
37. Syracuse
38. Portland, Oregon
39. Canton
40. New Orleans
41. Wichita
42. Grand Rapids
43. Worchester
44. Wheeling-Steubenville
45. Reading
46. Fort Worth
47. San Diego
48. New Haven
49. York

40,000-59,999

50. New Britain-Bristol
51. South Bend
52. Utica-Rome
53. Lancaster
54. Waterbury
55. Memphis
56. Denver
57. Binghamton
58. Erie
59. Trenton
60. Wilmington
61. Peoria
62. Chattanooga

Source: Industrial Location Division, Office of Area Development. Based on 1954 Census of Manufacturers

In the face of such obvious vulnerability, industry must be protected in every possible way. Dispersion is the most practical way of insuring against complete disruption of the Nation's industrial economy in the event of a nuclear war. The use of space to separate or scatter creates many small targets rather than a few large ones, and serves to deter attack by making attack more difficult and less profitable.

In discussing the need for dispersion it should be emphasized that dispersion, as it applies in the national industrial dispersion program, is limited to the practice of encouraging the placement of new or expanded industrial and governmental facilities at distances adequately removed from industrial and population concentrations, and away from other strategic targets likely to be bombed in the event of war.

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Dispersion does not mean relocation, nor does it mean decentralization. The dispersion program has as its objective the dispersion of new and expanding industry, not the movement of existing industry from one place to another. One of the basic tenets of the program is that no region of the country is to be built up at the expense of another. Further, adequate dispersion normally can be effected within local marketing areas—cities need not fear the loss of industry to their market areas through the operation of the program.

PART III. MOBILIZATION ACTIVITIES OF OTHER COMMERCE AGENCIES

WEATHER BUREAU

SUMMARY REPORT ON MOBILIZATION ACTIVITIES

Since the scope of the request by the Joint Committee on Defense Production for a report on mobilization activities is much more extensive this year, it is interpreted to include civil defense functions. Those programs performed by the Weather Bureau in support of civil defense are, therefore, included along with other readiness activities under the appropriate sections of the outline suggested by the committee.

1. Mobilization programs conducted by your department

Programs conducted in support of civil defense are:

(*a*) Meteorological consultant service to ODCM.
(*b*) The fallout forecasting (U.F.) program.
(*c*) Radiological monitoring observations.

2. The authority from which your department derives its powers for such programs

Programs (*a*) and (*b*) are performed under the authority of ODCM delegation No. 3 and (*c*) under a cooperative agreement.

3. A summary of each program

(*a*) The capability for providing meteorological support to the national and regional offices of ODCM is maintained through the assignment of meteorological consultants to those offices and provisions for "backup" under the executive reserve program in the event of an emergency.

(*b*) Estimates of areas likely to receive radioactive fallout in the event of nuclear explosions derived from an interpretation of the meteorological factors affecting the deposition of particulate matter are made and distributed nationally for 65 observing points twice per day. For 20 of the observing points, these services are performed 4 times per day. These estimates, properly charted and interpreted, can be applied to any point in the United States.

(*c*) Under cooperative agreement with ODCM, the Weather Bureau participates in the Federal Fixed Station Fallout Monitoring Network. About 70 field stations have now been supplied with monitoring equipment and personnel trained in their use. Approximately 200 additional offices will join the network as soon as instruments become available. This program operates on a minimum basis of one monitoring reading per week to maintain familiarity of the personnel with procedures and to check operability of the instruments. Coincident with an alert or emergency, readings will be taken hourly.

4. A summary on the effectiveness of the programs

Programs (*a*) and (*b*) have been evaluated through the annual Operation Alert exercises and judged very effective. Only about one-fourth of the offices planned for participation in program (*c*) have been supplied with instruments due to shortage of supply. Those having instruments are participating effectively.

5. A statement on the current need for the programs

Programs (*a*), (*b*), and (*c*) are essential if an all-out effort is to be made for civilian survival in event of a nuclear attack.

6. A summary of the programs as related to small business

Not applicable.

7. Major problems which now confront your department in carrying out mobilization programs

The major problem encountered in carrying out mobilization and civil defense programs with which this Bureau is concerned is the availability of funds for these purposes.

8. Changes in mobilization planning and stockpiling to meet an attack or other emergencies, including a statement of any action taken on the recommendations of the Special Stockpile Advisory Committee (Pettibone committee)

Not applicable.

9. Progress achieved in the continuity of Government, the continuity of production, and the dispersal of industry

In planning for continuity of Weather Bureau service, relocation sites have been chosen and placed in readiness for the headquarters office, the four regional offices, and the National Meteorological Center which supports in addition to the Weather Bureau, meteorological offices of the DOD. A succession of command has been established to insure executive and technical direction of the Bureau. A cadre of key operating personnel has been selected for each of the relocation sites and plans developed for their activation if required.

10. Summary of any standby programs for any future emergency

Plans are being developed in coordination with the military to provide for the control of weather information in time of war.

11. Changes in organization during the past year

There have been no changes in organization during the past year.

12. Availability of funds for defense needs

No special funds have been provided the Weather Bureau for defense needs except under the delegation from ODCM.

13. A description of the manner in which your mobilization programs fit into a defense plan, and the objectives to be achieved

Weather Bureau plans for operation in a war emergency are pointed toward maximum support of the military forces. Continuous coordination is effected in this area through Weather Bureau representatives on the joint meteorological group of the Joint Chiefs of Staff. Another objective is assistance to civilian survival efforts.

14. A statement of action taken as a result of any recommendations of the Joint Committee on Defense Production, including the recommendations contained in the seventh annual report of this committee

Not applicable.

15. Such other information as may appear pertinent in summarizing your mobilization activities for the past year

None.

Coast and Geodetic Survey

Report of Mobilization Activities

1. *Mobilization programs conducted.*—Mobilization planning; Operation Alert exercises including occupation of relocation sites by selected key personnel; remote storage of essential records program; civil defense training; identification card program.

2. *Authority.*—DMO I–8, 19 F. R. 875, February 16, 1954 (par. 2 (i)) Assignment of defense mobilization responsibilities to the Department of Commerce. Regulations governing cooperation of the Coast and Geodetic Survey with the armed service (under authority contained in sec. 16 of the act of May 22, 1917 (40 Stat. 88)). Department Order No. 161.

3. *Summary of each program.*—Mobilization planning is primarily to insure continuity of essential functions.

Operation Alert exercises are primarily concerned with plans for mobilization and attack situations and include practice operations at relocation sites.

Essential records program includes remote storage of essential records at several dispersed sites.

Civil defense training includes first aid, rescue, building wardens, evacuation, survival, and radiological instruction and detail of personnel.

Identification card program consists of issue and control of civil defense identification cards to key relocatees and civil-defense personnel.

4. *Summary of effectiveness of the programs.*—Coast and Geodetic Survey has a mobilization plan for the continuity of essential functions. The plan includes occupation of a relocation site, standby emergency orders, an order of succession, and a relocation manual. The plan would be more effective if the headquarters and production plant were moved to a safe minimum distance from probable target area.

Operation Alert exercises are effective for training of selected key personnel, and for determining problems and inadequacies of use of relocation sites.

The essential records program is one of this Bureau's most effective items of preparation for emergency. Separate color pulls of all nautical and aeronautical charts which are printed, and copies of geodetic, tidal, and other geophysical data are sent to these dispersed depositories. The program can be further improved when funds are available to substitute plastic for present paper copies of chart pulls, and for additional microfilming.

Civil Defense training includes the following personnel:

First aid	114
Warden service	82
Fire-fighting service	31
Light rescue	16
Radiological defense	1

5. *Current need for the programs.*—Programs are needed as preparation for emergency and mobilization situations.

6. *Programs as related to small business.*—There is no direct relation of these programs to small business.

7. *Major problems.*—Programs are handicapped because there have been no direct appropriations. Costs have had to be absorbed.

8. *Stockpiling.*—Coast and Geodetic Survey has no connection with the stockpiling program. The bureau is especially concerned about an adequate stock of chart paper and supplies of film and related photographic and lithographic supplies.

9. *Progress achieved.*—Plans have been made for continuity of Government in regard to essential functions of Coast and Geodetic Survey. The continuity of production of charts will depend to a large extent on the continued existence of present printing plant, or of a suitable substitute therefor. Thirteen district offices, mobile field parties and survey ships, and essential records storage provide a reasonable degree of dispersion for most essential functions except printing. Chart printing, if present plant were attacked, would depend on emergency allocation of commercial lithographic printing facilities.

10. *Standby programs.*—All above programs are active. There are standby orders and instructions but no standby programs as such.

11. *Changes in organization.*—No changes during past year.

12. *Availability of funds.*—No funds have been appropriated directly for defense needs. Costs to date have had to be absorbed. This has limited program.

13. *Programs fit into defense plan.*—Objective of programs is to insure continuity of essential functions.

14. *Joint Committee on Defense Production.*—Not directly applicable to Coast and Geodetic Survey.

15. *Other information.*—Participated directly in Operation Alert 1958, primarily at the regional and field level for phase I and by having key headquarters personnel occupy relocation site for phase II.

Bureau of the Census

1. Mobilization activities of the Bureau of the Census fall into two broad categories:

(*a*) Activities conducted under the continuity of Government program which involves emergency planning for the carrying on of essential functions during a period of national emergency; and

(*b*) Activities undertaken on a reimbursable basis for agencies which have primary responsibility for defense and mobilization programs under the Defense Production Act. These statistical support activities are described more fully below. (See par. 3.)

2. (*a*) Authority for emergency planning activities under the continuity of Government concept is derived from DMO I–8 of February 16, 1954.

(*b*) Authority for undertaking activities on a reimbursable basis for other Federal agencies is derived from title 31, United States Code, section 686.

3. The mobilization activities of this Bureau may be summarized briefly as follows:

(*a*) Under the continuity of Government programs, emergency planning activities are conducted under the guidance of the Office of Civil and Defense Mobilization and the Department of Commerce. These activities are designed to develop and maintain plans to insure the continuity of essential functions of the Bureau in the event of attack on the United States. During the past year, this Bureau participated, both departmentally and in the field, in all phases of Operation Alert 1958. The results of this participation have been reported fully to the Office of Civil and Defense Mobilization.

(*b*) The statistical support projects undertaken by the Census Bureau on a reimbursable basis during the past year will be reported by the primary agencies concerned. It may be of assistance to the committee, however, if these activities are described briefly in this report since they are illustrative of the kinds of services which census is prepared to supply in the defense and mobilization effort:

(1) *For the Office of Civil and Defense Mobilization.*—The Census Bureau undertook a project to up-date industrial production data for some 29,000 large (over 100 employees) manufacturing establishments. This work, which involved also the assigning of accurate geographic locations to each of these plants, was done for the National Damage Assessment Center of OCDM. The results have been transferred to NDAC on magnetic tapes for use in electronic computer systems. This project was funded jointly by the Department of Defense and the Office of Civil and Defense Mobilization.

(2) *For the Business and Defense Services Administration.*—The Census Bureau assisted BDSA in a large scale mail canvass of production capability and existing stocks of some 500 critical survival items. In fiscal year 1958, some 125 surveys were undertaken at the manufacturing level, and 1 survey was completed at the wholesale level. Census participation included the establishing of mailing lists, the mailing of schedules, the tabulations of results, and the geographic identification of the production facility or existing inventory.

(3) *For the Department of Agriculture.*—

(*a*) The Census Bureau assisted the Department of Agriculture in surveying food stocks held at the wholesale and retail levels. This information is needed for the national food plan for which the Department of Agriculture has primary responsibility. Census participation consisted of a sample survey of some 10,000 food outlets throughout the country in order to determine the equivalent man-days of food supply held by merchants.

(*b*) Also, for the Department of Agriculture, a pilot household inquiry was conducted to determine the man-days of food supply held in households. The purpose of the pilot study was to determine the feasibility of undertaking this work on a nationwide basis. To date, no decision has been reached on continuing this survey activity.

14. The Seventh Annual Report of the Committee contains the following statement on page 10:

"Damage assessment information on tapes must be expanded to determine the effect on end-item production, materials, components, and subassemblies which are used to manufacture end items. Damage assessment must give consideration to the relationships which exist between various segments of the economy and the overall impact."

The Census Bureau has cooperated closely with OCDM's National Damage Assessment Center in efforts to improve the quantity and quality of resource data for damage assessments. As the principal factfinding agency of the Government, the Census Bureau is uniquely qualified to assist in these improvements.

With the approval of officials of the OCDM, the Census Bureau included an item of $300,000 in its fiscal year 1959 budget presentation to the Congress. This amount was requested for the purpose of undertaking statistical projects in support of the requirements of the National Damage Assessment Center for data to be consolidated into its national resource file. This request was approved by the Bureau of the Budget but denied by the Congress.

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Office of Business Economics

During the past year OBE has participated in the Department's mobilization planning and programs in the capacity of observer. While remaining fully informed on the Department's participation in defense planning activities, OBE's contribution has been mainly in the steady provision of basic economic intelligence which is essential to economic mobilization programs of all agencies of Government.

Pending designation of a special economic mobilization planning unit in the top echelons of Government OBE has not been subject to special directives from ODM or FCDA. In view of the existence of the Council of Economic Advisers, such designation may be unnecessary. Most important is the fact that OBE continues to provide current reports and expanding detail on the national income and the gross national product, data which are fundamental to the conduct of emergency economic programs.

To illustrate the last point, the official history of World War II may be quoted. The following statements appear on pages 13–14 of Industrial Mobilization for War, published in 1947 by the Superintendent of Documents, United States Government Printing Office:

"Programing of defense production, from the fall of 1940 on through Pearl Harbor, was therefore a combination of United States defense and foreign aid, with both programs constantly shifting in response to strategic developments. In the beginning, there was neither centralized planning, centralized procurement, nor centralized statistical controls to correlate both programs and determine feasibility in terms of resources and facilities. The story of programing all during 1940 and until late in 1941 is that of the struggle to achieve unification of both programs, and coordination of procurement and planning."

One of the consequences of the pressing need to assess the feasibility of meeting total defense requirements was the creation of the gross national product series by the present Office of Business Economics. That series linked with OBE's previous work in the fields of national income and the United States balance of international payments has subsequently become a fundamental economic tool for private business as well as Government programing. The continuation and extension of this work represents OBE's contribution to current mobilization activity.

Patent Office

The emergency readiness plans of the Patent Office, at present, relate solely to the preservation of essential records, to the continuity of its existence as a Government agency, and to the conduct of "bedrock" essential wartime activities. None of these plans contemplates any requirements of new or enlarged operations, increased manpower, or new or unusual claims upon material resources. Indeed, on the contrary, under assumed mobilization conditions the Patent Office would greatly diminish both in number of employees and scope of activities.

Under a sudden or phased reduction in operations, a considerable number of highly trained and experienced scientific and technical personnel, now employed as patent examiners, would become available for more urgent and important duties contributing to national survival. In order that this valuable manpower resource might be promptly and effectively utilized, measures to facilitate screening for selection and placement by priority claimants should be in a high state of readiness. With a contribution to this end in view, the Patent Office is formulating plans to classify and code the qualifications of its examiners and administrative personnel.

National Bureau of Standards

The National Bureau of Standards has functions essential to be continued in an emergency, consisting particularly of the provision and calibration of standards for military and essential civilian production, and the provision of specialized services for Department of Defense, Office of Civil and Defense Mobilization, and other agencies on military materials, restoration of industrial potential, and evaluation of technical and scientific devices and proposals.

The emergency organization, functions, and authorities of NBS have been described in detail in Emergency Planning Order 1–12 of the Department of Commerce, dated June 26, 1957. Essentially this order provides an emergency readiness organization responsible for insuring advance preparations to move quickly into emergency operations, for discontinuing nonessential operations, and for providing interim supervision following an emergency. (This organization

currently superimposed on the Bureau's regular structure might largely be continued during the emergency operation stage should NBS be permanently relocated to Gaithersburg, Md., prior to an emergency.) An emergency operations organization has been designated to restore operation of essential functions following an emergency. It consists of a liaison staff at the emergency relocation headquarters of the Department of Commerce, a staff at the Boulder laboratories of the Bureau at Boulder, Colo., and other components at a site or sites to be selected.

In the past year there has been one highly significant change which not only furthers the joint committee's policy on dispersal but goes a long way toward assuring the postattack survival of NBS as a functioning organization. The Congress has made available funds for the production of detailed architectural and engineering designs for a new facility to be built at Gaithersburg, Md., on land which has already been acquired.

CIVIL AERONAUTICS BOARD

CIVIL AERONAUTICS BOARD,
Washington, September 15, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States, Washington, D. C.

DEAR SENATOR ROBERTSON: In accordance with your letter of April 14, 1958, requesting a factual summary of the mobilization activities of the Civil Aeronautics Board for the past year, we are submitting the enclosed report.

If the committee's staff have any questions in connection with this report, they may contact Mr. John W. Dregge, Chief, Routes Division, Bureau of Air Operations, code 112, extension 3063 or 3064.

Sincerely yours,

JAMES R. DURFEE, *Chairman.*

REPORT OF ACTIVITIES UNDER THE DEFENSE PRODUCTION ACT

1. Programs conducted by the Civil Aeronautics Board under authority of the Defense Production Act as implemented by Executive orders, departmental orders, delegations, etc.

(*a*) Delegation to Chairman covering distribution and redistribution of civil aircraft: Under the authority conferred upon the Secretary of Commerce by Executive Order 10219 and pursuant to section 301 (b) (2) of this Executive order, the Secretary of Commerce in Department of Commerce Order 139, March 26, 1952, and Department of Commerce Order 139 (revised), May 27, 1957, delegated authority to the Chairman of the Civil Aeronautics Board to "formulate plans and programs for, initiate actions for, and carry out such distribution and redistribution of civil aircraft among the civil carriers as may be necessary to assure the maintenance of essential civil routes and services after allocation of aircraft has been made to the Department of Defense."

2. The authority from which the Civil Aeronautics Board derives its powers for such programs

Executive Order 10480, August 18, 1953, transferred the emergency powers over air transportation from the Defense Production Administrator to the Director, Office of Defense Mobilization. Defense Mobilization Order 1–7, September 4, 1953, redelegated these emergency powers pertaining to air transportation to the Secretary of Commerce. It is in accordance with Executive Orders 10219 and 10480 that the Secretary of Commerce has issued Department Order No. 139 (revised) redelegating part of his authority to the Chairman of the Civil Aeronautics Board.

3. Summary of each program

The Chairman of the Civil Aeronautics Board, in exercising the delegation of power covering distribution and redistribution of civil aircraft, has appointed an Industry Advisory Committee on Aviation Mobilization to assist in formulating plans and programs for such activities. This Industry Mobilization Committee is under the chairmanship of the Director of the Bureau of Air Operations, Civil Aeronautics Board. Governmental representatives act as chairmen of three task groups which have been formed within this committee. The duties of the three task groups are as follows:

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Task group 1.—Development of an estimate of wartime air transport requirements as a planning tool not only for use of the Board but also for use of the Defense Air Transport Administration and Office of Civilian and Defense Mobilization in evaluating civilian versus military need for airlift in connection with requests for allocations to the Civil Reserve Air Fleet.

Task group 2.—Determination of the method of allocating airlift between carriers to implement the war air service pattern including the assurance of provision of adequate personnel and maintenance facilities.

Task group 3.—Development of financial and legal machinery for transfer of airlift between carriers under the war air service pattern.

The parent committee, the Industry Advisory Committee on Aviation Mobilization, is currently considering the reports of task group 1 and task group 2. Task group 3 has requested advice on the programing of its assigned responsibilities and will be considered at a meeting of the parent committee to be held within the next month.

4. Summary of the effectiveness of the programs

The effectiveness of the programs has been impaired to some extent by a lack of clarity as to the Board's responsibilities for maintenance of the so-called war air service pattern. The war air service pattern embodies the maintenance and operation of essential air routes and service during an emergency. It is not clear under the delegation of power to the Chairman of the Civil Aeronautics Board by the Secretary of Commerce whether this delegation includes the responsibility for maintenance of the so-called war air service pattern. Meetings have been held with the Office of Civilian and Defense Mobilization in an attempt to resolve this problem and we expect that a resolution of the difficulties will be concluded in the near future.

5. Current need for the programs

The Civil Aeronautics Board believes that it is important that efforts be continued to keep the programs current and in readiness in the event of an emergency. The Board is constantly reviewing its responsibilities and is updating all programs to keep pace with the rapidly changing industry.

6. Program as related to small business

Essentially there are no small business implications in the air transport industry unless the local service, territorial, and supplemental airlines could be considered as such. These carriers are an integral part of Board planning in the event of an emergency and would be utilized to the fullest possible extent.

7. Major problems which now confront the Civil Aeronautics Board in carrying out the mobilization programs

As noted in the summary of the effectiveness of the programs, the Civil Aeronautics Board is currently engaging in meetings with the Office of Civilian and Defense Mobilization to clarify its responsibilities durng an emergency. Present programing apparently does not utilize the experience and expertise of the Civil Aeronautics Board and its staff during an emergency.

8. Changes in mobilization planning and readiness measures to meet future emergencies

It is contemplated that direct delegation of power by Executive order to the Chairman of the Civil Aeronautics Board or to the CAB will clarify and effect better utilization of the CAB and its staff during an emergency situation. The Board and the staff have cooperated in developing standards for a war air service pattern and readiness measures to meet future emergencies. Such measures are under constant review and updated when required.

9. Summary of any standby programs for any future emergency

The Civil Aeronautics Board has developed standby programs for staffing of the Board in a future emergency. It has prepared standards for the maintenance of an efficient air transport system during an emergency situation.

10. Changes in organization during the past year

There have been no changes.

11. A description of the manner in which the mobilization programs fit into a defense plan and the objectives to be achieved

The Civil Aeronautics Board with its objective to maintain air transportation during an emergency situation would necessarily fit its program into the

overall transportation program. This would be accomplished through close coordination with other forms of transportation and with proper concern for the operation and maintenance requirements of air transportation as it concerns the overall national supply requirements. The objective to be achieved is to maintain adequate transportation first of all to meet the war needs and secondly to maintain civil economy to the greatest extent possible.

12. A statement of actions taken as a result of any recommendations of the Joint Committee on Defense Production

No recommendations have been received from the Joint Committee on Defense Production.

13. Summary

The Civil Aeronautics Board is currently reviewing mobilization activities for the past year and meeting with the Office of Civilian and Defense Mobilization in an effort to improve its potential of providing the greatest amount of air transportation possible during an emergency situation.

DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., September 30, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States, Washington, D. C.

DEAR SENATOR ROBERTSON: In response to your request of August 14, 1958, we submit with this letter summary reports of defense mobilization activities of agencies and offices of the Department of the Interior during the last year, ending September 30, 1958.

The reports transmitted herewith include one from each of the following: Office of Assistant Secretary—Water and Power Development (electric power), Office of Oil and Gas (petroleum and gas), Office of Minerals Mobilization (metals and minerals, except domestic minerals exploration, and solid fuels), Defense Minerals Exploration Administration, and United States Fish and Wildlife Service (fishery commodities).

The report on operations of the Defense Minerals Exploration Administration covers the actions which terminated the execution of new contracts for DMEA exploration projects on June 30 ,1958, and delegated to the Director of the new Office of Minerals Exploration, established on September 11, 1958, authority under the Defense Production Act of 1950, as amended, to administer DMEA contracts in effect on June 30. As the report explains, the Office of Minerals Exploration has been established to carry out the statutory responsibilities of the Secretary of the Interior pursuant to Public Law 85–701, as well as to provide for continuing administration of contracts executed by the former DMEA and still in effect. The report sets forth the transition from the former DMEA program, financed under the borrowing authority of the Defense Production Act, to the new program to provide Federal financial assistance for minerals exploration projects under Public Law 85–701, financed through annual appropriations.

Except for the recent replacement of the Defense Minerals Exploration Administration by the Office of Minerals Exploration, there has been no change during the last year in the pattern of Interior's organizational units to which defense mobilization functions are delegated. Secretary's Order No. 2833 (23 F. R. 7554) dated September 22, 1958, left all delegations with respect to such functions the same as they were under the superseded order No. 2822, except in the case of minerals exploration. In October 1957, Mr. Edward D. Frye was appointed as Assistant to the Secretary to provide a focal point for coordination of this Department's defense functions and programs.

The Director of the new Office of Civil and Defense Mobilization, into which the former Office of Defense Mobilization and Federal Civil Defense Administration were merged on July 1, 1958, has continued in effect the delegations of authority and orders of the ODM and FCDA with respect to this Department's defense mobilization functions. This is reflected, in various forms, in the citations of authority in the several reports submitted with this letter. A complete statement of the sequence of actions pertaining to the merging of ODM and FCDA into the OCDM and the continuation of delegations of authority is presented in the DMEA report.

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Continuing emphasis has been placed on the refinement of defense mobilization plans to assure readiness of this department to discharge its responsibilities in the event of a nemergency. The department's regular bureaus and offices, as well as the units performing mobilization functions under OCDM delegations, participate in this effort.

As a part of our readiness activities, a program for the training of selected personnel of the department as instructors in radiological monitoring was instituted during the fall of 1957. Particular emphasis has been placed on enrolling field personnel for such training. The objective is to develop a group of individuals qualified to train persons to give instruction in radiological instrument operation. To date, approximately 68 employees have been trained as instructors in radiological monitoring. Certain of them are initiating similar training programs in industries within our purview. In the areas of our responsibility for the continuity of essential functions of both Government and industry after an attack, we wish to improve and extend capability for radiological monitoring as much as possible.

Sincerely yours,

ELMER H. BENNETT,
Acting Secretary of the Interior.

DEFENSE ELECTRIC POWER, OFFICE OF ASSISTANT SECRETARY, WATER AND POWER DEVELOPMENT

Fred G. Aandahl, Assistant Secretary

This report covers the operations of the defense electric power program from October 1, 1957, through September 30, 1958.

PROGRAM

The program consists essentially of the development of preparedness measures in the electric power field to plan for an adequate power supply including generation, transmission, distribution, and utilization thereof, for the Nation under mobilization conditions.

Under Federal Civil Defense Administration delegations, Interior has responsibility for planning a national program, providing technical guidance to the States directing Federal activities concerned with emergency restoration of electric service to attacked areas, and provision of adequate electric utility service to support areas.

Under Office of Defense Mobilization delegations, Interior has numerous responsibilities including: providing guidance and leadership to the power industry in the development of plans and programs to insure the continuity of essential electric power production in event of attack; developing and maintaining programs for operation of electric utilities under mobilization conditions; developing, assembling, and evaluating data as to the production capacity of electric utilities; analyzing the programs involved in maintaining adequate reserve capacity and recommending necessary programs; assembling as requested by the Office of Defense Mobilization data on requirements for electric power; developing, assembling, and evaluating data as to materials, equipment, transportation, and other requirements for the electric power industry under mobilization conditions; cooperating with the Office of Defense Mobilization and other appropriate agencies in planning production and distribution controls; advising with respect to orders, regulations, and directives as they may affect the electric power industry.

AUTHORITY

The administration of defense functions pertaining to electric power is vested in the Secretary of the Interior under the Defense Production Act of 1950, as amended; Executive Order 10480 of August 15, 1953, as amended; Office of Defense Mobilization Order I–13 of November 12, 1954; DMO–I–7 (formerly DMO–30) of August 14, 1953; DMO VII–5 of October 7, 1953; Federal Civil Defense Administration delegations 3 and 4 as approved by the President on August 13, 1955, and November 22, 1955, respectively; and interim directive No. 2 of the Office of Defense and Civilian Mobilization dated July 1, 1958.

The assignment of responsibility within the Department of the Interior with respect to these functions is set forth in order No. 2833 of the Secretary of the Interior, dated September 22, 1958 (23 F. R. 7554). Order No. 2833 continues unchanged the provision for defense electric power functions in the superseded

orders No. 2822, dated July 11, 1957; No. 2781, January 6, 1955; No. 2764, June 29, 1954; No. 2755, April 23, 1954; and No. 2726, June 30, 1953.

SUMMARY OF PROGRAM ACTIVITIES

Phase I: Operation Alert 1958

Phase I was held on May 6 and 7. There was considerable activity in preparation of policies and procedures for electric power participation in the May phase. Several conferences were held with ODM and FCDA with respect to bomb-damage assessment and radioactive fallout problems.

Interior prepared and through its acting area directors sent to some 548 utility systems a memorandum of instructions and guidance for the exercise. The dates and objectives for the three phases of the exercise were explained. All were requested to participate. Methods of bomb-damage assessment and fallout delineation were furnished. A survey form was included for use of each utility system to report:

1. Hypothetical bomb-drop locations.
2. Estimated bomb damage and fallout denial to generation, transmission, substation, and distribution facilities.
3. Estimated load loss due to bomb damage and fallout.
4. Materials and equipment in inventory and that required for repair or relocation during the first 6 months.
5. Manpower available before and after the bomb drops together with surplus or shortage during the first 6 months.
6. Man-hours of utility personnel participating in the exercise.
7. Power problems received from Civil Defense.
8. Comments or suggestions.

OPAL Energy and Minerals Agency established and delegated authorities to OPAL Electric Power Administration. OPAL Electric Power Administration set up 16 field areas, appointed in each an acting area director and redelegated authorities.

All 16 defense electric power field areas participated. Power liaison from the industry were present at most civil defense offices. The utilities devoted over 18,000 man-hours to this phase. Reporting forms were received from some 325, representing about 90 percent of the Nation's generating capacity. The response by the industry indicates its awareness of the defense problem and its readiness and willingness to serve in a national emergency.

Of main interest to the utilities was the seriousness of fallout and the problems it created. Of interest, too, were material supply and requirements after attack conditions, and, of course, blast-damage effects.

The defense electric power staff made hand-damage assessments. There was considerable similarity in the damage assessment summaries made by representatives from indusrty, Interior, and the National Damage Assessment Center.

Using all available data including bomb damage assessment printouts, utility reports, and power staff assessments, a comprehensive analysis was prepared of the power sitution in the United States following phase I with estimates of restoration ability. This was submitted to OCDM and was made available to regional and central offices for the second phase of the exercise.

The analysis of the generating plants indicated that the capacity considered out of service due to blast and fallout, as a result of the simulated attack, would be over 60 percent. The analysis of substations of 25 millevolt-amperes and over showed a similar situation. The generating capacity available after the attack exceeded the remaining loads. Over 50 percent of the original capacity of generating plants and substations could be restored to service within 90 days and about 80 percent within 1 year. Transmission and distribution lines could be made available as generating facilities were restored. The exercise revealed that materials and equipment in inventory would meet requirements for the first 90 days and thereafter would have to be obtained from producers of survival items. Loss of manpower while serious, resulted in a shortage of some 10 percent.

Phase II: Operation Alert 1958

Phase II of the exercise was held on July 14–18. Observers from Interior's electric power staff were present at four of the regional offices for part of the exercise. Power liaison representing the 16 power area field offices participated at all 8 OCDM regions.

Interior's relocation center was staffed on July 16–18 by Interior, Federal Power Commission, and industry personnel.

For phase I of the exercise, Interior's plan provided for solving local power problems on a local level. Those unsolved were to be referred through State civil defense to the appropriate OCDM regional office during phase II. Any unsolved problems at the regional level were to be referred to OPAL Electric Power Administration headquarters. Of over 300 utilities, only 54 reported that Civil Defense had contacted them in relation to power problems during the exercise. Only one power problem was referred to OEPA headquarters by the regions. This indicates that much more needs to be done in developing knowledge about power problems connected with survival activities as well as cooperative procedures between the utilities and local and State civil defense offices.

Problems were initiated at the relocation center for solving at the regional level. Several interconnections between large systems were studied by the participating personnel at the relocation center. For the exercise conditions, recommendations were made for installation of those interconnections essential to defense.

Essential survival items

The Inter-Agency Committee on Essential Survival Items, established by OCDM, agreed on a list of power items considered necessary for national survival in a postattack situation. The list contains such items as line materials, transformers, tools, and trucks. This material and equipment would be basic items needed for the repair and construction of facilities for transmission and distribution of essential power for survival and restoration requirements in a postattack period.

OCDM has requested Interior to supply information as to usages and normal inventories by locations of these items. A questionnaire form has been prepared and approved by the Bureau of the Budget. Arrangement has been made with the Federal Power Commission for the collection of this data from some 900 power systems. The information obtained will be inserted in OCDM's bomb damage assessment machine. It will also be of considerable value to Interior in defense electric power mobilization planning.

Data for damage assessment

Preparedness for damage assessment in the event of an enemy attack requires the assembling of comprehensive data on electric generating plants and substitutions. In 1954, data on some 500 generating stations with capabilities of 50,000 kilowatts and over and 1,700 substations with transformer ratings of 25,000 kilovolt-amperes and over were obtained from utilities and industries. The data obtained was furnished to the Bomb Damage Assessment Center. To broaden the coverage, a new questionnaire was developed in cooperation with the Federal Power Commission and approved by the Bureau of the Budget. The coverage on generating stations will include those of 10,000 kilowatts and over, owned or operated by utility systems and industries. The number of stations covered will be about 1,200 which will embrace approximately 96 percent of the total capacity in the Nation. Also covered will be the generating stations and substations which have gone into service since the last survey and any changes in ratings which have occurred. The information to be obtained will include the type of construction which in turn will determine the vulnerability of the plant to blast. The questionnaire will be sent out to 340 utility systems and 215 industries. The information is essential to defense electric power central and regional offices in their mobilization planning and will also be furnished to the Bomb Damage Assessment Center.

Meetings with industry

At a meeting in Biloxi, Miss., in April, an Interior official outlined to a large group both the defense electric power program and electric industry participation in the 1958 exercise. The group consisted of operating and engineering personnel from power systems located in some 25 States.

The Department of the Interior's functions and activities with respect to electric power were presented to a large group of utility operating personnel at meetings in Wichita, Kans., and Roanoke, Va.

Emergency electric power organization problems were discussed with State civil defense and utility officials in New York and Maryland.

At various times during the year conferences have been held with representatives from industry both in Washington, D. C., and at various locations. Prob-

lems in connection with the establishment of field organizations throughout the Nation to function in the event of a national emergency in providing, to the extent possible, electric power to essential services were discussed.

Civil defense activities under FCDA Delegations 3 and 4

A reivew has been made of several State and area preliminary operational survival plans, prepared under FCDA's program, to determine what each area is doing with respect to electric power. This review will enable Interior to better coordinate electric power activities.

Radiological monitoring instructions

A program has been initiated to train electric-power industry personnel as instructors in radiological monitoring. Radiological defense will be an important function in providing for continuity of electric service in the event of a nuclear attack on the United States. Each electric power system must have a substantial and widespread corps, well trained and equipped, to detect and measure radioactiivty. This will be essential for the conservation of skilled manpower, so necessary for the operation of their remaining system and the restoration and continuity of service for human survival.

The program is progressing. Preparations for 32-hour courses are underway. Many of the teaching aids and instruments have been assembled. Instructors have been selected from department personnel who have attended FCDA courses for instructors of radiological monitoring. Classes consisting of about 20 persons each will be held in various sections of the Nation. These persons, in turn, will initiate similar courses for the training of instrument operators within their own system. The proposed course in radiological training has been approved by the Federal Civil Defense Administration. A training kit has been requested and applications for byproduct material licenses for training purposes have been made. One license has been received.

Capabilities, loads, and reserves

The capability forecast for the electric power systems in the United States for the end of years 1958 through 1961 will be slightly less than previously reported. The presently predicted December peak loads for these years are some 1 to 2 million kilowatts less than formerly estimated. The kilowatt-hours usage for the first half of 1958 showed little change from the similar period for the previous year. There has been considerable slippage in the planned additions for 1958, 1959, and 1960.

December peak capabiilties, peak loads, and gross reserves as actually occurred in 1956 and 1957, and as forecast for the years 1958 through 1961, on the basis of median hydro conditions, are shown for the country as a whole below:

Year	Capabilities (millions of kilowatts)	Loads (millions of kilowatts)	Reserves (percent of loads)
1956 (actual)	122.6	102.4	19.6
1957 (actual)	130.6	106.9	22.2
1958 (estimated)	142.0	115.6	22.9
1959 (estimated)	155.0	124.2	24.7
1960 (estimated)	166.0	134.1	23.0
1961 (estimated)	175.0	144.8	20.9

The predicted reserves, that is, the capability in excess of loads, remain about the same as previously reported. Nationwide they will be in excess of 20 percent.

EFFECTIVENESS OF THE PROGRAM

The effectiveness of the electric power program was demonstrated by the cooperation and interest of the electric power industry during the 1958 exercise when utility participation in phase I on May 6 and 7, involved over 18,000 manhours.

Operation Alert has brought to the attention of the power industry personnel the seriousness of conditions which might confront them in the aftermath of an attack. Fallout has generated many questions. Of particular interest is the denial of access to portions of their systems and methods of handling manpower in contaminated areas.

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At most of the regional meetings of operating personnel of the utilities held throughout the Nation semiannually, civil defense matters pertaining to electric power have been placed on the agenda. Interior's defense electric power staff members are frequently invited to participate. Lively discussions take place. Great interest in mobilization plannig has been created and participation in the defense electric power organizations has been stimulated.

CURRENT NEED FOR THE PROGRAM

During the first phase of the 1958 exercise some 282 hypothetical nuclear bombs, equivalent to 642 million tons of TNT, were dropped. Yet only 54 requests were referred by local civil-defense offices to the local power liaison.

Few, if any, power problems were passed on from localities to States and from States to the OCDM regional offices. This resulted in a decided lack of realism during phase II and did not adequately test the present limited field organizations. If there was an actual emergency, problems involving more than local action would arise and the electric power area directors, Federal regional headquarters, and the Interior Department's relocation center for defense electric power, would be swamped as soon as communications were available.

In summary, the exercise pointed up the following need for a continuation of the program:

The impact of fallout on operations and the necessity for further improvement in method of assessment and action on training of personnel capable of assessing radiological fallout; the importance of sufficient materials to meet rehabilitation and new construction needs; the need for a more complete electric power organization for defense purposes; and, the continued technical guidance to State civil-defense organizations. Particularly, much more needs to be done in developing knowledge about power problems connected with survival activities as well as cooperative procedures between utilities and local civil-defense offices.

SMALL BUSINESS

The electric power industry in the Nation is composed of some 3,600 systems operated by some 450 private utility companies, 1,900 municipalities, 1,000 rural cooperatives and public-power districts, 40 Federal and non-Federal Government agencies, and 210 industrial companies. About 70 percent of these fall in the small-business category. Inasmuch as the heavy responsibility during an emergency will fall on systems which generate large blocks of power Interior has, until this time, dealt mostly with the larger utilities. For the 1958 exercise systems with small blocks of power and many of those having only transmission and distribution were included. They were informed of Interior's plans and they participated in bomb damage, materials, and fallout assessment.

MAJOR PROBLEMS

A major problem has confronted Interior in carrying out its defense electric-power program. This has been the appointment of WOC's from industry as area directors, deputies, and alternates in the 16 field areas. There is a legal ambiguity which concerns the appointment of those men who occupy positions with their companies requiring them, as a part of their normal duties, to negotiate or execute contracts with agencies of the Federal Government.

It has been concluded that it would be unwise to offer appointments to individuals who, by virtue of the positions which they occupy with their companies, execute or negotiate contracts with the Government. The decision is based solely on Interior's inability to give positive assurance to such an individual that he would not be held in violation of such provisions as section 281 or 434 if he were (while a WOC employee) to execute or negotiate a contract with the Government on behalf of his company, although he had no connection with the contract in his governmental capacity.

Interior's attorneys have given this matter careful consideration and there have been informal discussions with attorneys in the Department of Justice. The consensus is that the limitations on the exemptions given by section 710 of the Defense Production Act of 1950 were intended to prevent a WOC appointee from representing his company and the Government at the same time—that is, "sitting on both sides of the table" and do not apply to the duties in the defense electric power program. Nonetheless, the language of the statutory provision mentioned is not so explicit as to be free from doubt and there are no court

decisions involving WOC appointees under these provisions. Consequently, so there will be absolutely no doubt about complying with the statutes, Interior will not appoint from industry any individual who as a part of his duties negotiates or signs other than routine contracts with any agency of the Federal Government. Letters have been sent to all prospective appointees advising them of this decision. It is anticipated that some appointments can be made during the fiscal year and that definite field organizations can be established.

STANDBY PROGRAMS

In carrying out the present delegations with respect to electric power from the Office of Defense Mobilization and the Federal Civil Defense Administration to the Secretary of the Interior, this Office is continuing its program of preparing for the establishment of a central agency at a relocation site and field organizations throughout the Nation ready to function in the event of an attack in order to provide, to the extent possible, electric power to essential services.

Central agency.—Plans include the activation and staffing of a central electric power agency at a relocation center. The nucleus would consist of the present electric power staff, employees from Interior's power bureaus, Federal Power Commission employees, and personnel drawn from the industry. It is assumed that an enemy attack would disrupt communications and transportation and that this central agency could not be effective until communications were available. Even though for some time after such an attack the central agency could not be informed of, much less cope with, electric power problems arising in the wake of a nuclear attack, it should be set up to do its job at the earliest practical time in the postattack period.

Field organizations.—No central office alone, regardless of how well staffed, could handle directly certain types of immediate postattack problems such as emergency service for human survival and early restoration of other essential power facilities. To assure that electric service will be available where most needed during such a period, reliance must be placed on a field organization.

Sixteen power areas have been established. Each area will be headed by a director. In the event that he is incapacitated, his work will be carried on by alternates who have been (and will be) selected from scattered locations within the area. Means of delegation of authority to area directors and in turn to their alternates are being worked out so that they can carry out a whole range of emergency actions on their own and without central agency direction, should that prove necessary.

In event of attack, the area director would have to direct and curtail energy flows; assign priorities for use of equipment; work with other area directors in making interarea transfers of energy, equipment, and supplies; and requisition and allocate material supplies in the inventories of utilities in this area.

A close relationship must be maintained between all electric utilities and all levels of civil defense. As a part of the area organization, power liaison is to be established at every city, county, State, and regional civil-defense office. Each power liaison representative will be from the utility serving the area in which the civil-defense office is located. This relationship is as important for support areas as for attacked areas since support areas may well become primary energy sources. Through the power liaison, civil-defense officials will be aware of the status of electric power in the event of an attack and the utilities will be informed of civil-defense actions that may affect them.

OFFICE OF OIL AND GAS

Petroleum and gas defense mobilization functions under the Defense Production Act of 1950, as amended, and civil defense functions under the Federal Civil Defense Act, acquired by delegations to the Secretary of the Interior, were carried on without interruption under the leadership of the Director of the Office of Oil and Gas.

New arrangements for the conduct of Federal defense mobilization and civil defense functions were placed in effect pursuant to the President's Reorganization Plan No. 1 of 1958, prepared in accordance with the Reorganization Act of 1949, as amended. In this reorganization, the Office of Defense Mobilization and the Federal Civil Defense Administration were consolidated in the Executive Office of the President, effective as of July 1, 1958, and the agency is known as the Office of Civil and Defense Mobilization. Authority delegated and functions

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transferred by the President to OCDM are contained in Executive Order 10773, dated July 1, 1958.

On April 1, 1958, Capt. Matthew V. Carson, Jr., USN, succeeded Mr. Hugh A. Stewart, as Director of the Office of Oil and Gas, following his retirement on February 28, 1958. Mr. Ralph S. Fowler was appointed Assistant Director on July 31, 1958, replacing Mr. Carroll D. Fentress who had resigned.

The status of defense mobilization and civil defense programs and related activities carried on by the Office of Oil and Gas are presented in this report.

VOLUNTARY AGREEMENT RELATING TO FOREIGN PETROLEUM SUPPLY

Secretary of Interior Fred A. Seaton and Assistant Secretary of the Interior Royce A. Hardy are Administrators of the Voluntary Agreement Relating to Foreign Petroleum Supply, as amended May 8, 1956. The agreement was established pursuant to the provisions of section 708 of the Defense Production Act of 1950, as amended.

Periodic reviews of the situation concerning the operation of this voluntary agreement were made to provide advice and information to the Department of Justice. The Attorney General is required under the Defense Production Act of 1950, as amended, to review outstanding voluntary agreements and to report every 90 days to the President and the Congress the results of each survey. Continuation of the Voluntary Agreement Relating to Foreign Petroleum Supply has been approved by the Attorney General.

This agreement authorized the formation of a committee and subcommittees to advise Government on how best to obtain such information as Government needs relating to foreign petroleum operations and to requirements and supplies of petroleum. The Administrator appointed the Foreign Petroleum Supply Committee to assist in accomplishing the objectives of the agreement. FPSC is composed of 16 American companies engaged in foreign petroleum operations which are participants in the agreement. Each of these companies has designated a senior official to serve as representative and alternate on FPSC. Capt. M. V. Carson, Jr., is the Chairman of the Foreign Petroleum Supply Committee.

Under the voluntary agreement, the Foreign Petroleum Supply Committee is also authorized, upon request of the Government, to consider and make recommendations designed to prevent, eliminate, or alleviate shortages of petroleum supplies in friendly foreign nations which threaten to affect or which do affect adversely the defense mobilization interests or programs of the United States.

In July the Government of Iraq fell and subsequently American troops landed in Lebanon and British troops in Jordan at the request of the respective governments of these countries. Because of the importance which supplies of petroleum from the Middle East bear to the mobilization interests and programs of the United States, the Secretary of the Interior called the Foreign Petroleum Supply Committee into session on July 23, 1958, in order to review and explore conditions in that area.

At this meeting representatives of the Department of State and of the Department of Defense reviewed the situation for the benefit of the Committee. There was submitted to members of the Commitee a draft of a plan of action which had been worked out by several Government agencies. The Committee was not asked to recommend a plan of action, as no finding of an emergency was made under section 6 of the voluntary agreement. However, in view of the seriousness of the situation, members of the Committee were asked to consider the draft plan and invited to submit comments in order that, should the need arise, action might be taken quickly. The occasion for emergency action did not arise during the period of this report.

LONG RANGE PETROLEUM STUDY

Background upon which to base a long-range national security policy on pertoleum resources and supply is being developed at the request of the Office of Civil and Defense Mobilization. Framework for this long-range study has been outlined by the Office of Oil and Gas. It will cover the years 1960, 1965, and 1975, and will include an evaluation of the potentialities of United States petroleum reserves and productive capacity, trends and projections for consumption, and use of petroleum and its products, as well as consideration of potential substitute fuels and use of nuclear energy.

The Office of Oil and Gas, Bureau of Mines, and Geological Survey are participating in this extensive study, together with industry consultants selected by OCDM.

OPERATION ALERT 1958 AND EXECUTIVE RESERVE

Operation Alert 1958 was the fifth nationwide civil defense exercise. Its purpose was to examine the readiness of the Nation to meet a direct nuclear attack on the United States, and to provide for training of governmental personnel and the general public. It commenced with the attack phase on May 6 and 7, which was a simulated direct nuclear attack on the United States. Only State and local government organizations were active in this phase.

Since the Office of Oil and Gas does not maintain a field staff, it relied on the oil and gas industries fo rassistance and cooperation. OOG selected and arranged for a number of experts in the oil and gas industries to give assistance at 15 State civil defense headquarters during the attack phase.

In the Federal action phase, held July 16–18, a simulated emergency petroleum and gas administration, a component organization of an emergency energy and minerals agency, went into operation. Its national headquarters, located at Interior's relocation center, was staffed by the Office of Oil and Gas, and the representatives, performing the functions of regional field offices, were stationed at each of eight regional offices. Representation at each regional office, as arranged by the Office of Oil and Gas, consisted of 1 person from the gas industry and 2 persons from the petroleum industry. These individuals were briefed on their role in the exercise at a conference sponsored by the Office of Oil and Gas on July 1.

During this July phase of the exercise, the national headquarters of the Emergency Petroleum and Gas Administration and the regional representatives evaluated the adequacy of surviving supplies and production capability to meet postattack requirements, and formulated and executed plans to deal most effectively with the petroleum and gas situation existing during the period from 14 to 90 days following the attack.

Representatives from the petroleum and gas industries were present at the Department's relocation center as observers during the July phase of the exercise.

An evaluation phase, conducted in September, in which the Federal agencies evaluated the measures taken in the first two phases of this exercise and the adequacy of current plans to cope with an emergency in event of nuclear attack on the United States, concluded Operation Alert 1958.

This exercise showed marked improvement in preplanning for this civil defense exercise and in discharging the responsibility of directing Federal activities designed to procure, store, transport, and distribute adequate gas and petroleum supplies to attacked areas.

We believe the petroleum and gas functions could be more effectively discharged with the assistance of a group of experts from the petroleum and gas industries at the regional and possibly the State level. Therefore, the Office of Oil and Gas has renewed its activities looking to the establishment and training of a petroleum and gas unit in the Interior executive reserve. Establishment and training of a nucleus executive reserve for employment in executive positions in Government during periods of emergency are authorized under section 710 (e) of the Defense Production Act of 1950, as amended.

LOANS TO PRIVATE ENTERPRISE

The Department of the Treasury may guarantee loans for projects that are essential to national defense under the provisions of section 302, title III of the Defense Production Act of 1950, as amended. Certificates of essentiality by the Director of the Office of Civil and Defense Mobilization are prerequisite to granting a Government loan guaranty.

Two long-pending oil pipeline projects were subject to extensive study and review within the Department of the Interior. Special appraisals and studies of petroleum supply and demand for each of the areas to be served by the proposed pipelines, including classified wartime assumptions provided by the Department of Defense, were made by the Office of Oil and Gas. Certificates of essentiality for these two projects were denied late in June by the Director of the former Office of Defense Mobilization. One proposal was for a petroleum products pipeline from Texas to the east coast estimated to cost $230 million, and the other was for a proposed crude oil pipeline from west Texas to California estimated to cost $146 million.

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INDUSTRIAL EXPANSION GOALS AND ACCELERATED TAX AMORTIZATION

Sufficient capacity exists or is planned to meet the known petroleum and gas mobilization requirements. Therefore, the incentive of accelerated tax amortization under section 168 of the Internal Revenue Code of 1954 is no longer available for even the very limited types of oil and gas facilities which might be eligible for consideration under criteria set forth in Public Law 85–165, enacted in August 1957.

Industrial expansion goal No. 206 (laboratories, research and development) and goal No. 224 (production facilities for military and atomic energy procurement), under which oil and gas facilities could be considered for rapid tax amortization, were closed on March 31, 1958, by the former Office of Defense Mobilization.

During the period September 1957 through August 1958, the Office of Oil and Gas has analyzed and has prepared departmental reports and recommendations to the Office of Civil and Defense Mobilization on 5 applications for rapid tax amortization and 51 postcertification actions.

WARTIME PLANNING AND THE MILITARY PETROLEUM ADVISORY BOARD

At the request of Government, the Military Petroleum Advisory Board has initiated action and studies necessary for a new report on wartime worldwide petroleum and gas supply and demand under assumptions and guidance furnished by the Departments of Defense and Interior.

PETROLEUM AND GAS STUDIES AND THE NATIONAL PETROLEUM COUNCIL

Current information and advice on many phases of the petroleum and gas situation and industry operations are valuable to Government in its peacetime activities as well as in mobilization and civil defense planning. In the past year, five reports have been received from the National Petroleum Council on studies made at the request of the Director of the Office of Oil and Gas. These NPC reports covered (*a*) United States refining capacity by principal refining areas; (*b*) United States petroleum transportation capacity, by pipelines, railroad tank cars, tank trucks, inland river barges, and lake tankers; (*c*) productive capacity of the United States for crude oil and natural gas liquids; (*d*) the above ground storage capacity in this country for crude oil and the four principal petroleum products; and (*e*) the productive capacity for liquefied petroleum gases.

COORDINATION IN STATE AND FEDERAL PLANNING

State plans for survival in event of nuclear attack on the United States have been reviewed by the Office of Oil and Gas. State civil defense officials have also been in consultation with the Office of Oil and Gas regarding their problems and coordination of State and Federal planning with respect to petroleum and gas.

Survival plans examined by the Office of Oil and Gas include those for Florida, Georgia, Kansas City, Mo., and surrounding area, Lincoln-Omaha-Council Bluffs area of Nebraska, Maine, Maryland, Massachusetts, Mississippi, New York, New York City metropolitan area, Ohio, Oklahoma, Philadelphia, Pa.-Camden, N. J.-Wilmington, Del., area, Vermont, Virginia, and Washington, D. C.

COOPERATION WITH FOREIGN GOVERNMENTS

The Office of Oil and Gas continued to provide petroleum advisers to the United States delegation at the meetings of the North Atlantic Treaty Organization's Petroleum Planning Committee. Assistant Director Frederick S. Lott served as Chairman of the NATO Petroleum Planning Committee's Working Group, which carried on the technical studies for the Committee. The advisers attended scheduled meeting of the Committee and its Working Group in Paris, France. The Office of Oil and Gas also participated in the development of these petroleum studies.

Technical advice and assistance was also furnished to the United States delegation in the Oil Committee of the Organization for European Economic Cooperation.

VOLUNTARY OIL-IMPORT PROGRAM

A voluntary plan for reduction in crude oil imports was approved by the President on July 29, 1957, as recommended by the Special Cabinet Committee which

had investigated the crude oil imports and concluded that imports were threatening to impair the national security and that in order to maintain a healthy domestic industry which could meet any national emergency there should be a limitation on imports that will insure a proper balance between imports and domestic production. The program was put into effect by the Secretary of the Interior and the Director of the former Office of Defense Mobilization. This program is administered by Capt. Matthew V. Carson, Jr., in his capacity as administrator of the voluntary oil import program.

The vast majority of the oil-importing companies have on an individual voluntary basis participated in this program and have cooperated fully with the Government in reducing their oil imports to the Government-recommended level.

AUTHORITY

The composition and functions of the Office of Oil and Gas are described in chapter 111.5 of the departmental manual. Authority for the OOG mobilization and civil-defense functions is derived from—

The Defense Production Act of 1950, as amended (50 U. S. C. App. secs. 2061–2166, Public Law 85–471);

Executive Order No. 10480, as amended (50 U. S. C. App. sec. 2153, note);

Executive Order No. 10660 (21 F. R. 1117);

Executive Order No. 10773 (23 F. R. 5061) as amended by Executive Order 10782 (23 F. R. 6971);

Defense Mobilization Order I–7, as amended (18 F. R. 5366, 6737, 19 F. R. 7348);

Defense Mobilization Order I–13 (19 F. R. 7348);

Defense Mobilization Order I–21 (21 F. R. 1269) (Revised 23 F. R. 3529);

Defense Mobilization Order VII–5, as amended (18 F. R. 6408, 19 F. R. 7349);

Order No. 2833 of the Secretary of the Interior dated September 22, 1958 (23 F. R. 7554), superseding Order No. 2822 (22 F. R. 5779);

NPA Delegation No. 9, February 26, 1951 (17 F. R. 1908), as continued by Business and Defense Services Administration Regulation No. 1 (18 F. R. 6337);

Defense Transport Administration Delegation No. 6, May 5, 1951 (16 F. R. 4149), as amended February 19, 1954 (19 F. R. 1071), and continued by Interstate Commerce Commission by Organization Order DTA 1, as amended June 27, 1955 (20 F. R. 4550);

Section 168 of the Internal Revenue Code of 1954;

Federal Civil Defense Delegation No. 3 dated August 13, 1955 (20 F. R. 5957);

Interim Directive No. 2 of the Office of Defense and Civilian Mobilization, dated July 1, 1958.

Office of Minerals Mobilization

This report summarizes the operations of the Office of Minerals Mobilization, Department of the Interior, under the Defense Production Act and related legislation during the year ending September 30, 1958.

AUTHORITY

The Office of Minerals Mobilization was established by the Secretary of the Interior in January 1955. Secretary's Order No. 2781, dated January 6, 1955 (20 F. R. 316), delegated to the Director of the Office of Minerals Mobilization certain functions under the Defense Production Act and related legislation with respect to solid fuels and metals and minerals, except domestic minerals exploration functions performed by the Defense Minerals Exploration Administration and certain operational functions delegated to the Administrator of General Services. These functions were delegated by the Secretary pursuant to delegation of authority and assignments made to the Secretary by the Director of the Office of Defense Mobilization in Defense Mobilization Orders I–7, as amended (18 F. R. 5366, 19 F. R. 7348), VII–5, as amended (18 F. R. 6408, 19 F. R. 7349), and I–13 (19 F. R. 7348). Under Federal Civil Defense Administration Delegation No. 3 (20 F. R. 5957), effective August 13, 1955, the Office of Minerals Mobilization is responsible for certain functions with respect to planning for distribution of solid fuels in FCDA areas in the event of emergency.

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The delegations of authority to the Director of the Office of Minerals Mobilization initially set forth in Secretary's order No. 2781 have been continued in Secretary's orders No. 2822 (22 F. R. 5779) and No. 2833, dated September 22, 1958 (23 F. R. 7554). On July 1, 1958, the Director of the new Office of Defense and Civilian Mobilization (renamed on August 26 as the Office of Civil and Defense Mobilization) issued interim directive No. 2 continuing in effect all delegations and orders of the former ODM and FCDA.

The Office of Minerals Mobilization is a departmental unit, reporting to the Assistant Secretary, Mineral Resources. A description of its functions appears in chapter 111.4 of the departmental manual.

RESPONSIBILITIES, PROGRAMS, AND PROCEDURES

Responsibilities of the Office of Minerals Mobilization may be summarized as including (1) the continuing evaluation of the preparedness position of the United States in mineral raw materials and solid fuels, (2) advising the Office of Civil and Defense Mobilization with respect to the adequacy of the mobilization base for individual commodities as conditions change, and, also, with respect to Government programs, including the use of Government financial aids and incentives, in those instances where it appears that such assistance would be needed to assure an adequate mobilization base, and (3) the development and advancement of preparedness measures which can be taken by Government and by industry to assure continuity of supply of these commodities in the event of enemy attack upon the United States.

Among the many factors considered in evaluations of preparedness in the field of minerals are relationship of mobilization requirements (as determined by OCDM) to current and potential levels of production at all sources, both domestic and foreign, the status of the national stockpile of strategic and critical minerals, the accessibility of sources under wartime conditions, the size and potential productivity of known reserves, and the developments in technology which may affect mining, processing, or utilization of the subject mineral in the future.

If the Office of Civil and Defense Mobilization, after considering ODM's evaluations and recommendations, determines that a mineral program involving the use of Government financial aids and incentives or procurement should be inaugurated, modified, or terminated, OCDM certifies the program or action to the Administrator of General Services for administrative implementation.

By Executive Order 10480, the Administrator of GSA has responsibility for purchasing and making commitments to purchase metals and minerals under authority of the Defense Production Act. Since in the case of mineral raw materials, there would sometimes be a relationship between the negotiation of procurement contracts and the function of screening and making recommendations to ODM on individual requests for loans, guaranties, and accelerated tax amortization, the function of making such recommendations on individual requests was delegated to the Administrator of GSA by Interior-Defense delegation I (19 F. R. 9357) on December 22, 1954, with respect to the aspects of production and processing of metals and minerals assigned to the Secretary of the Interior. In connection with GSA's performance of its delegated function, as well as the procurement function, the Office of Minerals Mobilization furnishes such data and consultation as the GSA may request.

In the case of solid fuels, the pattern of delegations of authority with respect to recommendations on individual requests from applicants for accelerated tax amortization and other forms of financial aids and incentives differs from the above-described pattern for minerals. Such recommendations pertaining to solid fuels were made directly to ODM by the Office of Minerals Mobilization. As predicted in the last previous annual report, the enactment of Public Law 85-165 terminated the submission of applications for necessity certificates for accelerated tax amortization for solid fuels facilities. Therefore, this report, and future reports, will not include data on necessity certificates. Various projects previously reported are still under construction, while others were completed during the period under review without appreciably altering the data submitted as to the costs and capacity of these facilities. The annual report of the General Services Administration presents data with respect to accelerated tax amortization for mineral facilities. Also, the GSA report, rather than this report, includes information on the use of borrowing authority provided by the Defense Production Act in connection with mineral supply, except domestic exploration, which is covered in the report on operations of the Defense Minerals Exploration

Administration. Under FCDA Delegation No. 3, OMM is responsible for planning and directing a program designed to assure procurement, transportation and distribution of adequate solid fuels supplies to attacked areas and reception centers consistent with the national emergency fuels program.

Additional responsibilities of the Office of Minerals Mobilization, pertaining to mineral raw materials and solid fuels alike, include: (1) estimation of materials, equipment, transportation, and other requirements of these industries under partial and full mobilization conditions; (2) preparation of standby orders and regulations as readiness measures; (3) provision of guidance and leadership to these industries in the development of plans and programs to insure continuity of essential production in event of attack; (4) cooperation with the Industry Evaluation Board in the identification and rating of essential facilities; (5) participation in the activities and planning of the Department of the Interior designed to insure continuity of essential functions of the Department in event of an attack on the United States, and (6) participation in the activities of the Department in the development of a program for the training of instructors in radiological monitoring.

Minerals mobilization base studies

During the period from October 1, 1957, to September 30, 1958, 14 new comprehensive base evaluations were completed as follows: Celestite, cadmium, talc, rare earths, bauxite, manganese (metallurgical grade), tungsten, iron ore, mica, beryl, fluorspar, columbium-tantalum, nickel, and bismuth. A special study was made on the copper situation and one on high temperature and other special property materials. Other special studies were made on bismuth and nickel. In addition studies were made on commodities which had not yet reached procurement priority levels. Notable among these were studies on asbestos (amosite), selenium, and chemical grade manganese.

Stockpiling

With respect to stockpiling of metals and minerals, the Office maintained a watch on the size and nature of the strategic stockpile and Defense Production Act inventories in relation to estimated wartime requirements. Independent evaluations were made and the Office engaged in interagency consultations on questions of disposals of excess and subspecification materials, beneficiation and further processing of inventories, specification and packaging changes, new purchase and transfer authorizations and further industrial production expansion and maintenance of existing production capacity in metals and minerals.

Special work was undertaken for the Special Stockpile Advisory Committee, and subsequently with ODM and other agencies in evaluating its recommendations. The policy reexamination phase of the work culminated in the June 13 announcement by the Director of ODM of a revision of the policy for stockpiling strategic and critical materials. This office, in cooperation with other agencies, assisted ODM and its successor, OCDM, in implementing the revised policies.

The supplemental stockpile acquisitions of strategic metals and minerals under the agricultural surplus disposal program and acquisitions under the domestic minerals purchase program required attention by the Office during this year. The Office carried out staff work and represented the Department in interagency consultations with the Department of Agriculture, ODM and OCDM on acquisitions under the agricultural barter program. In July the Secretary appointed the Director as Interior's representative on the Supplemental Stockpile Advisory Committee on Barter.

The Office provided staff advice and evaluation on the defense aspects of existing and proposed domestic minerals purchase programs, and on other Government programs, proposals, and legislation having a bearing on imports, procurement, and domestic production of metals and minerals.

Special-property materials

The Special Stockpile Advisory Committee, chaired by Mr. Holman D. Pettibone, recommended that attention be given to the prospective needs for high-temperature and other special-property materials. In response to a request from the Director of the former Office of Defense Mobilization to the Secretary of the Interior, dated June 30, 1958, this Office is keeping in touch with the rapidly changing developments in this field of materials and will prepare reports for submission to the Office of Civil and Defense Mobilization twice a year—in October and April, as now scheduled.

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Commodity abstracts

During fiscal year 1958 commodity data summaries were completed on all g metals and minerals assigned to the Office of Minerals Mobilization. These sum maries are being kept current and the information supplied to various operating officials of the Department.

Continuity of industry

Standby orders covering the distribution of materials and supplies to the minerals industry have been reviewed with the object of having them mesh with proposed standby control orders developed by the Business and Defense Services Administration for use by an emergency production agency in event of a grave national emergency without enemy attack or in a postattack situation. As a preparedness measure for either contingency, standby orders bearing upon the allocation of appropriate mineral raw materials have been reviewed and brought into position where they conform with the proposed delegation to an emergency minerals and metals agency which mobilization plans envisage.

During the past year a brochure entitled "An Alert to the Minerals Industry" was published and widely distributed. The purpose of the booklet was to point out the need of industry to undertake certain steps to formulate a disaster survival plan to assure the continuity of their individual operation in the event of attack. Further publications of similar nature and purpose are currently in the planning stage.

While the need to call industry advisory committees into meetings during the year was not indicated, the rosters of the individual committees were reviewed and membership changes were noted for future reference where such additions and changes were found necessary. The committees, as presently constituted, provide an excellent cross section of each industry with small and large concerns represented. They are immediately available for consultation on any matter affecting the national defense.

Operation Alert, 1958

During the early part of the calendar year, the Office devoted considerable time to preparation for participation in the various phases of the 1958 alert. This entailed attendance at a number of planning meetings with ODM personnel, meetings at the departmental level, and indoctrination meetings within the Office.

Phase II of Operation Alert was held July 15 through 19. The Director, 13 members of his permanent staff, and 1 consultant participated in this exercise. In addition one representative from the Bureau of Mines and one from the Geological Survey were assigned to OMM in the minerals area, and three from the Bureau of Mines were assigned to assist OMM in its solid fuels problems. Six Bureau of Mines regional employees participated in the alert from their respective headquarters.

At the close of the alert, a memorandum critique of the exercise was prepared, together with suggestions for future alerts.

Plan C (June, 1957) was reviewed and suggestions submitted for inclusion in any revision of this plan.

Executive reserve program

The Office continued to recruit industrialists from the minerals, metals, and solid fuels industries to serve in the executive reserve program. To date 40 reservists have been designated by the Secretary to serve with the OMM unit of this program and 2 more are in process of appointment. The aim of the Office is to recruit to the depth of 3 individuals for each job in the emergency organization which is scheduled to be filled by a reservist.

On November 13 and 14, 1957, a national defense executive reserve conference was held in Washington under the auspices of the former Office of Defense Mobilization. Twenty-three OMM reservists participated in this conference, which on November 13 was addressed by the President of the United States who emphasized the importance of the program and his personal interest in its success. On the 14th, the reservists in the metals field participated in an indoctrination session in the Department of the Interior held for the purpose of acquainting them with the functions of OMM and the Department. Briefings were given them as to the purpose of the program and the proposed activities of the reservists in the event of an emergency. The solid fuels reservists who had previously been indoctrinated in the duties they would be expected to perform during an emergency attended a classified meeting with the reserve unit of ODM.

On June 26 of this year those reservists who had not previously received indoctrination in this program were invited to Washington for a briefing session.

The Office has been careful to see that small business is represented in the executive reservists who have been appointed.

Continuity of Government

Plans for the establishment of an emergency minerals and metals agency and an operational plan for such an organization for use in the event of attack or the declaration of an emergency has been revised and brought into concert with revised overall emergency plans.

Additional operating material, including duplicates of vital records, informational data, and operational supplies were sent to the departmental relocation site for use during exercise operations and possible emergency operations. The possible use of these materials by someone not too familiar with our planning and with the details of operations—in the case of a headquarters blotout—has prompted the methods employed in filing and rather detailed explanations accompanying. Materials have been kept at a minimum, consistent with immediate and effective action in an emergency. Duplicates of records are screened for essentiality. These records are vital to the administration of an emergency minerals and metals agency. These records are organized, filed, and safeguarded for availability as needed. Materials assembled at the site were updated and placed in current position quarterly during the year. The work of maintaining the site at top operating efficiency insofar as equipment, supplies, and operating data are concerned is a continuing activity of this Office.

Bomb-damage assessment program

Input data have been submitted to the National Damage Assessment Center for the byproduct coke industry. It is contemplated that during the current fiscal year similar input data on the anthracite, bituminous coal, lignite, and beehive coke industries will be compiled and submitted to the NDAC.

In addition to the data supplied to the National Damage Assessment Center for assessing bomb damage and fallout hazards by electronic methods, fairly rapid hand assessment procedures are available from data now at the relocation site of the Office of Minerals Mobilization.

Data were also assembled on byproduct coke capacity for use in the national damage assessment program. The Office began compilation of similar data on 125 beehive coke plants and 500 anthracite-producing units for use in the NDAC digital computer. The assembly of this information, as well as data on bituminous coal involving over 1,500 production units, is continuing.

Input data were supplied to the center during the reporting period on minerals and metals not previously included. These data were secured from various sources, including the Bureau of Mines and Geological Survey. However, not all data needed are obtainable from Government sources. It became necessary to search in trade journals, papers, and other publications as well as to contact individuals in industry. The information now at the center covers the production facilities (mines, mills, smelters, etc.) of all the principal metals and minerals, and many of the minor ones, for which the Office is responsible. Due to the nature of the minerals and metals industry, it is needful that information already on file at the National Damage Assessment Center be constantly surveyed and changes and corrections made. This work of updating, additions, and deletions is a continuing function of this Office. The effectiveness and adequacy of the program and the completeness of the metal and mineral input data supplied by this Office were manifest during the annual alert exercise.

Coke

The capacity for the production of coke at the beginning of 1958 was 85,802,600 tons per annum, which consisted of 80,299,400 in byproduct ovens and 5,503,200 tons in beehive ovens. This capacity compares with the expansion goal of 85,800,000 tons. An additional 2,500,000 tons of byproduct coke capacity should be available early in 1959.

Metallurgical coal

It is estimated that 127 million tons of metallurgical coal would be required annually to operate at capacity the coke ovens in the United States, and an additional 5 million tons for Canadian ovens which rely on coal produced in the United States.

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The Bureau of Mines is now collecting data on the distribution of coal which makes it possible to evaluate the capacity of coal mines to produce metallurgical coal. A report just published by the Bureau of Mines shows that in 1957 the coal mines shipped 112,901,000 tons of coal to coke and gas plants. This tonnage includes shipments to destinations in the United States and exports to Canada and overseas. These figures indicate that the coal-mining industry has a capacity to produce 132 million tons of coking coal per annum. This would be sufficient to meet mobilization goals.

OMM will analyze the detailed reports from which the distribution data were compiled. This analysis will be made to measure the capacity of coal-producing districts in relation to the coke-producing areas served by these coal-producing districts.

Coal in Alaska

The coal mines in Alaska continue to be in a position to supply all civilian and military requirements.

Anthracite

The anthracite industry suffered a further decline in both production and productive capacity during the period under review. Current production indicates a probable output of 20 million tons with about 25,500 employees in 1958, a sharp reduction from the 1957 level. Since the industry employed approximately 78,000 workers as recently as 1944, this sharp reduction in employment has seriously affected the economic conditions in the anthracite region.

The Bureau of Mines is actively engaged in research projects to assist the industry, but immeidate benefits from this source, of a substantial nature, cannot be expected in the short-range future.

Bituminous coal

The bituminous coal industry is expected to produce and market approximately 400 million tons in 1958, nearly 100 million tons less than in 1957.

A large portion of this decrease in the production can be attributed to the generally lower rate of industrial production which characterized this period. Withdrawal from stockpiles, a sharp reduction in the rate of exports to European nations, and stepped-up competition with natural gas and imported residual fuel oil have also contributed measurably to the decline in production. The use of surplus natural gas as boiler fuel in the normal markets for bituminous coal is increasing, and imports of residual fuel oil have not declined in proportion to the reduction in industrial activity, thus displacing increasing quantities of bituminous coal along the Atlantic seaboard.

It is not anticipated that there will be any substantial increase in exports to European nations. Most European coal-producing countries now find themselves with increasing stockpiles of domestically produced coal which cannot be marketed. Prevailing low vessel rates make United States coal the most economical source of supply. Belgium, in particular, because of high production costs and the lower quality of her coal compared with imports from this country, is currently prevailing upon coal importers to renegotiate existing long-term contracts with United States coal exports to stretch out the delivery period. So far, no actual restriction on imports have been imposed, but stocks of domestically produced coal are still rising. The same situation is beginning to develop in the German coal industry, and new contracts, negotiations of which began after September 6, 1958, must be submitted to the Government for approval before they can be executed.

FCDA activities—Solid fuels

During the 12-month period October 1, 1957, to September 30, 1958, some progress has been made in discharging the responsibilities of the Secretary of the Interior pursuant to FCDA Delegation No. 3 for planning and directing Federal activities designed to procure, store, transport, and distribute adequate supplies of solid fuels to attacked areas and reception centers, consistent with the national emergency fuel program.

As explained in detail in the last annual report, a civil-defense emergency plan for solid fuels has been formulated. Some further refinements, of a minor nature, have been made to the plan to accommodate it to variations in the civil-defense plans of certain States.

The following tabulation shows the progress that has been made to date in obtaining agreements regarding the operation of the plan in the four regions in which this activity has been centered:

Completed, 22	In process, 6	Remaining, 0
REGION I (8 STATES)		
Connecticut. Maine. Massachusetts. New Hampshire. New Jersey. New York. Rhode Island. Vermont.	None.	None.
REGION II (8 STATES)		
District of Columbia. Kentucky. Maryland. Ohio. Virginia. West Virginia.	Delaware. Pennsylvania.	None.
REGION III (7 STATES)		
Alabama. North Carolina. Tennessee.	Florida. Georgia. Mississippi. South Carolina.	None.
REGION IV (5 STATES)		
Illinois. Indiana. Michigan. Missouri. Wisconsin.	None.	None.

Radiological monitoring training course

In February, the Coordinator for Solid Fuels attended an FCDA radiological monitoring course for instructors at Battle Creek, Mich. He was awarded a certificate for satisfactorily completing the course, thus qualifying him to train other persons from Government and industry.

Since that time, considerable work has been devoted to preparing lecture material for use in classes which he will instruct. Teaching aids, such as films, textbooks, etc., have been obtained, and classes can be started as soon as source material and licenses are obtained from the Atomic Energy Commission.

Defense Minerals Exploration Administration

The Defense Minerals Exploration Administration conducted a program under the Defense Production Act of 1950, as amended, for the encouragement of exploration for deposits of strategic and critical minerals within the United States, its Territories, and possessions from mid-1951 through June 30, 1958. Subsequent to June 30, 1958, the DMEA continued to administer exploration contracts which were in effect on that date. Actions pertaining to the termination of the DMEA program, the establishment of a similar program under the recently enacted Public Law 85–701 using appropriated funds rather than the Defense Production Act borrowing authority, and new organizational arrangements for administration of DMEA contracts still in force as well as the program under Public Law 85–701 are summarized below.

Announcement of termination of DMEA program

On June 6, 1958, the DMEA announced that funds to finance new minerals and metal exploration contracts would not be available, and that no such new contracts would be approved, after June 30. The announcement stated that exploration project contracts in effect on June 30, would be continued until terminated in accordance with the contract provisions. It also stated that effective immediately (June 6), the Government's financial commitment would

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not be increased in any existing contract where results to date had progressed to a point at which a certification of discovery or development could be issued. A notice with respect to the termination of the program under DMEA Order 1, revised and the continuation of contracts in effect on June 30, 1958, appeared in the Federal Register dated June 7 (23 F. R. 4003).

Enactment of Public Law 85–701 providing for new program

While the conferences between representatives of the former Office of Defense Mobilization and the Department of the Interior which culminated in the June 6 announcement of termination of the DMEA program were being held, the Congress was considering proposed legislation to establish a permanent program, similar to the DMEA program, to encourage exploration for minerals, with funds to be appropriated. Such legislation, as embodied in S. 3817, was enacted and became Public Law 85–701 upon approval by the President on August 21, 1958.

Public Law 85–701 authorizes and directs the Secretary of the Interior, "in order to provide for discovery of additional domestic mineral reserves, to establish and maintain a program for exploration by private industry within the United States, its Territories and possessions for such minerals, excluding organic fuels, as he shall from time to time designate, and to provide Federal financial assistance on a participating basis for that purpose."

Under the provisions of Public Law 85–701, the program being established will differ from the DMEA program principally in the following respects: (1) No funds can be made available unless the applicant furnishes evidence that funds from commercial sources are unavailable on reasonable terms, whereas the DMEA program did not require such evidence, (2) interest, calculated from the date of the loan, will accrue on Federal funds made available under any contract and such funds together with interest will be repaid as a royalty on the value of the produtcion from the area described in the contract, whereas DMEA contracts called only for repayment of the Government's contribution, without interest, by royalty payments on production, and (3) no single contract can authorize Government participation in excess of $250,000, whereas there was no limitation on the size of a single contract under the DMEA program.

Additional guidelines for the new program were contained in the conference report on the supplemental appropriation bill, 1959 (H. R. 13450). This report (H. Rept. No. 2677) stated, in comments concerning a new Office of Minerals Exploration, that the conferees were in agreement that participation by the Federal Government in exploration project contracts should not exceed 50 percent of the actual project cost. It also stated that in addition, emphasis should be placed on providing exploration assistance on those strategic and critical minerals and metals for which there is a serious shortage in the United States.

Funds for new program and administration of DMEA contracts in force

The Congress appropriated $4 million for this new program in fiscal year 1959, to be administered by a new Office of Minerals Exploration in the Department of the Interior. The Congress specified that not to exceed $900,000 of the amount provided shall be available for administration and technical services and that, in addition, not to exceed $200,000 shall be available from the borrowing authority funds of the Office of Defense Mobilization (now the Office of Civil and Defense Mobilization) for administering liquidation of contracts in force (i. e., DMEA contracts). This limitation on the amount which can be made available under the borrowing authority provided by section 304 (b) of the Defense Production Act pertains only to costs of administration. It does not apply to the use of borrowing authority funds for interest on notes issued to the Treasury and such amendments of DMEA contracts in force as might be necessary to obtain definitive results or otherwise to reach the target of the projects.

Establishment of Office of Minerals Exploration

On September 11, 1958, the Secretary of the Interior signed departmental manual release No. 183, establishing the Office of Minerals Exploration (ch. 111.6, departmental manual) to replace the Defense Minerals Exploration Administration and to carry out the statutory responsibilities of the Secretary pursuant to Public Law 85–701. It provided that authorities delegated to the Administrator of the DMEA will continue to be exercised by the Director, Office of Minerals

Exploration. Following issuance of this departmental manual release, Secretary's Order No. 2822, concerning defense functions, was revised to reflect the new arrangement specified in the release. The revised order, No. 2833 (23 F. R. 7554), was issued September 22, 1958.

Also on September 11, the Secretary signed a notice announcing that under authority contained in Public Law 85–701, it is proposed to issue regulations in the Code of Federal Regulations as set forth in the notice. This notice, which appeared in the Federal Register on September 17, 1958 (23 F. R. 7181), invited interested persons to submit written comments, suggestions, or objections with respect to the proposed regulations to the Director, Office of Minerals Exploration, within 30 days after the date of its publication in the Federal Register.

Reporting on operations

A summary of the operations of the DMEA during the period from September 1, 1957, through August 31, 1958, is presented in this report. Future periodic reports to the Joint Committee on Defense Production will cover subsequent operations of the Office of Minerals Exploration with respect to DMEA contracts. Reports on the new program under Public Law 85–701 will be submitted to the Congress, through the President, on March 1 and September 1 of each year pursuant to section 5 of that statute.

AUTHORITY

The authority for the DMEA program was derived, and authority for administration of DMEA contracts in effect upon termination of the program continues to derive, from the Defense Production Act of 1950, as amended (50 U. S. C. App., 1952 edition, secs. 2061–2166; Public Law 85–471). Section 304 of Executive Order 10480, as amended (18 F. R. 4939; 21 F. R. 1673), conferred the authority respecting the program upon the Director of the Office of Defense Mobilization, and pursuant to paragraph 3 of Defense Mobilization Order No. I-7 (formerly DMO–30), as amended (18 F. R. 5366, 6737; 19 F. R. 7348), this authority was delegated to the Secretary of the Interior, to be exercised in accordance with programs certified by the Director, ODM. The Secretary redelegated his functions to the Administrator of the Defense Minerals Exploration Administration by Interior Orders 2726 (18 F. R. 3804), 2755 (19 F. R. 2503), 2764 (19 F. R. 4005), 2781 (20 F. R. 316) and 2822 (22 F. R. 5779). The program is set forth in DMEA Order–1, revised (22 F. R. 8304). Notice of termination of the program was announced on June 6, 1958 (23 F. R. 4003).

Reorganization Plan No. 1 of 1958 (23 F. R. 4991) became effective on July 1, 1958, merging the Office of Defense Mobilization and Federal Civil Defense Administration into a new Office of Defense and Civilian Mobilization. By Executive Order 10773 (23 F. R. 5061) issued on July 1, 1958, the President delegated to the Director of the new ODCM, among other powers, the authorities under the Defense Production Act previously delegated to the Director of the former ODM and authorized redelegation of such authorities. On the same date, the Director of the ODCM issued ODCM Interim Directive No. 2, continuing in effect all delegations and orders of the former ODM and FCDA until rescinded, amended, or modified.

Public Law 85–763, approved August 26, 1958, amended Reorganization Plan No. 1 of 1958 to substitute the name "Office of Civil and Defense Mobilization" for the name "Office of Defense and Civilian Mobilization" wherever the latter name appeared in the plan. Executive Order 10782 (23 F. R. 6971), effective as of August 26, 1958, amended Executive Order 10773 to make references to names and titles consonant with the provisions of Public Law 85–763. Thus, as of August 26, the chain of delegated authority under the Defense Production Act for functions with respect to DMEA contracts still in effect extended from the President to the Director of the Office of Civil and Defense Mobilization, to the Secretary of the Interior, and to the Administrator of the Defense Minerals Exploration Administration. As mentioned previously in this report, the action of the Secretary of the Interior on September 11, 1958, establishing the Office of Minerals Exploration provided that authorities delegated to the Administrator of DMEA will continue to be exercised by the Director, Office of Minerals Exploration. This transfer was reflected in Secretary's Order No. 2833 (23 F. R. 7554), issued on September 22, 1958, superseding order No. 2822.

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SUMMARY OF THE PROGRAM

The same group of 34 minerals listed in the last annual report to the committee remained eligible for Government assistance under the DMEA program during the period from September 1, 1957, to June 30, 1958, when the program was terminated. On October 22, 1957, however, the percentage of the Government's contribution which could be made to the allowable costs of exploration projects under new DMEA contracts was reduced from 75 to 50 percent for 15 of these 34 materials as recommended by the Borrowing Authority Review Board of ODM. This action was reflected in the provisions of DMEA Order–1, revised (22 F. R. 8304) which became effective on that date.

The materials to which this reduction in percentage of Government's contribution to costs applied are asbestos (strategic chrysotile), columbium, corundum, diamonds (industrial), kyanite (strategic), mercury, monazite and rare earths, platinum group metals, quartz crystals (piezo-electric), tantalum, thorium, tin, tungsten, and uranium.

The 34 minerals which were eligible for exploration assistance under the DMEA program pursuant to DMEA Order–1, revised, are listed below and grouped according to the applicable percentage of Government's contribution to exploration projects for such minerals:

Fifty percent: Asbestos (strategic chrysotile), bauxite, cadmium, chromium, columbium, copper, corundum, diamonds (industrial), fluorspar, graphite (crucible flake), kyanite (strategic), lead, mercury, molybdenum, monazite and rare earths, platinum group metals, quartz crystals (piezoelectric), tantalum, thorium, tin, tungsten, uranium, and zinc.

Seventy-five percent: Antimony, beryl, cobalt, manganese, mica (strategic), nickel, rutile-brookite, selenium, and talc (block steatite).

The House Committee on Appropriations, in its report of February 14, 1958, concerning appropriations for the Department of the Interior and related agencies for the fiscal year 1959, directed that no additional tungsten exploration contracts be approved. Therefore, no further applications for tungsten exploration projects were approved by DMEA.

The Defense Minerals Exploration Administration entered into contracts with private parties for the exploration of indicated or undeveloped sources of these strategic and critical minerals and metals within specified areas or parcels of land. Each contract established an exploration project calling for the operator to complete specific work during a fixed period of time at costs estimated on an actual or fixed unit basis but limited in the total amount, and for the Government to contribute 50 or 75 percent of the allowable cost of the project, depending upon the mineral or minerals sought. If two or more minerals falling in different percentage groups were involved, the Government's contribution was set at 62.5 percent.

The exploration projects were approved by the Government only after careful investigation. They were based upon sound engineering principles, with definite plans and specifications established for the work to be performed. Ordinarily, projects were not approved for work which would require more than 2 years to complete; however, the time limit for most projects was fixed at a much shorter period.

The Government's contribution to the cost of a project was allowable only for direct costs, including labor, supervision, and consultants; workman's compensation and employers' liability insurance, and payroll taxes; operating materials, supplies and equipment; initial rehabilitation or repairs of existing buildings, fixtures, and equipment; necessary construction or installation of buildings or fixtures; repairs and maintenance of equipment; analytical work; and accounting. In order to expedite the projects, any costs for access road repairs or construction were included as part of the exploration cost since such roads were generally short and their cost small.

The operator was not charged interest on the Government's contribution to the cost of a project. If the Government considered that a discovery or development from which production might be made had resulted from the work, the Government so certified and notified the operator. Upon certification, all mineral production from the land covered by the contract became subject to a royalty payable at a rate of 1½ to not more than 5 percent of the "gross proceeds" or "value" of such production for a period of usually 10 years from the date of the contract or until the full amount of the Government's contribution was repaid, whichever occurred first. Under certain conditions, the repayment period was

set for a time longer than 10 years. Regardless of certification, all ore produced from the project during the term of the contract and for a period of 6 months after receipt of the operator's final report on the project was subject to the same royalty provisions.

For several years, DMEA has published and periodically revised a pamphlet entitled "The Defense Minerals Exploration Program." It has presented, in question and answer form, information which prospective applicants and operators frequently requested concerning the program. Following the issuance of DMEA Order 1, revised in October 1957, this pamphlet was revised to conform with the new regulations.

Financing the program

The exploration program was financed by borrowing funds from the Treasury under authorization of the Defense Production Act of 1950, as amended. Requests for funds as needed were made to the Office of Defense Mobilization which issued a certification for the amount that it approved. A total of $38.8 million of borrowing authority funds has been approved since the inception of the program in April 1951. As of August 31, 1958, $26,345,878 of this amount had been obligated or reserved for exploration projects, but only $21,654,414, had been disbursed. In addition, from the inception of the program in 1951, approximately $8,390,000 of Defense Production Act borrowing authority funds had been obligated for costs of administration and technical services and about $2,500,000, for interest accrued, to that time, on notes to the Treasury.

Organization for administration and coordination of the program

Unitil September 11, 1958, when its residual functions were transferred to the new Office of Minerals Exploration, the Defense Minerals Exploration Administration functioned as an organizational unit within the Department of the Interior under the supervision of the Assistant Secretary, Mineral Resources. A Policy and Coordinating Committee, comprised of the Assistant Secretary, Mineral Resources, as Chairman, the Administrator of the Defense Minerals Exploration Administration, the Director of the Bureau of Mines, and the Director of the Geological Survey served as a primary point of contact with other Government agencies, interpreted Federal policy relating to activities of the DMEA, established the broad area of working arrangements for the conduct of the DMEA program, and reviewed progress of the program.

The DMEA did not maintain a technical field staff but utilized the services of the technical staffs of the Bureau of Mines and Geological Survey for all field examinations, reports, project inspections, and field administration of exploration contracts, except auditing which was done by DMEA's own staff. The fieldwork was performed under the direction of five regional field teams, each team comprised of an engineer from the Bureau of Mines and geologist from the Geological Survey, with one being designated as the DMEA executive officer and the other as his alternate. All correspondence with and instructions to the field teams flowed through an Operating Committee in Washington which was composed of 3 members, 1 representing the Administrator of the DMEA, as Chairman, and 1 each representing the Director of the Bureau of Mines, and the Director of the Geological Survey.

Five field auditors, under supervision of the DMEA headquarters in Washington, D. C., made audits of operators' accounts, determined the propriety of payments under exploration contracts and regulations, and audited ore-shipment records and royalty payment accounts for projects in accordance with practice of the General Accounting Office.

In anticipation of the termination of its program, the DMEA during recent months did not fill vacancies in several positions on its staff, thus effecting an overall reduction of about 15 percent in personnel during the fiscal year 1958. A further reduction in staff of the Office of Minerals Exploration, to which DMEA staff was transferred, is being made as September draws to a close. The Bureau of Mines and Geological Survey took steps to reduce the number of their employees assigned to DMEA work effective July 1, 1958, and further curtailment of assignments of their personnel to this work has been made since that time.

Cooperation with other agencies

In addition to the close cooperation with the Bureau of Mines and the Geological Survey, the DMEA maintained cooperative arrangements with the Office of Defense Mobilization (and since July 1, 1958, with ODM's successor in function, now named the Office of Civil and Defense Mobilization) and the Office of Min-

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erals Mobilization because of their interests and responsibilities in the metals and minerals field.

The Atomic Energy Commission was consulted on applications for exploration of minerals of interest to it, and also on proposed contracts covering exploration for such minerals. The General Services Administration was consulted with respect to proposed exploration contracts on properties which were involved in procurement contracts with that agency, and it was kept informed of the results of explorations on successful projects. Close contact was also maintained with GSA in those instances where producers having DMEA contracts shipped ores or concentrates to Government stockpiles. The files of the former Reconstruction Finance Corporation were frequently used by the DMEA in reviewing applications for exploration aid to obtain information about the properties involved and any previous Government loans that were made on them. Cooperation also was given to the Attorney General and such agencies as the Securities and Exchange Commission, Tariff Commission, Small Business Administration, and the Treasury Department by furnishing information relative to DMEA applications and contracts. The DMEA Contract Administration and Audit Division cooperated with the General Accounting Office in its auditing program.

PROGRESS OF THE PROGRAM

The progress of the DMEA program is indicated by data given in the following paragraphs concerning applications, contracts, certifications of discovery or development, and repayments of the Government's contributions.

Applications

During the period September 1, 1957 (the date of available figures given in the Seventh Annual Report of the Joint Committee on Defense Production), through June 30, 1958 (the date after which applications were no longer accepted), the DMEA received 255 applications for exploration assistance. Since the beginning of the program, a total of 3,888 applications were received for projects located in 43 States and Alaska. In the 12-month period ending August 31, 1958, 184 applications were denied and 40 were withdrawn, bringing the total for denied and withdrawn applications to 1,973 and 692 respectively since the start of the program.

As of June 30, 1958, when the execution of new contracts was terminated, there were 87 applications pending in DMEA. Of these, 23 were sufficiently advanced in processing that they would have been denied if the DMEA program had continued, and the applicants were so advised. This left 64 applications pending as of August 31. Upon written request of the applicant, these pending applications for exploration assistance will be processed under the rules and regulations to be established for the new program under Public Law 85–701.

Contracts

The DMEA executed 104 contracts during the period September 1, 1957, through June 30, 1958, making a total of 1,159 contracts executed during the life of the program. The contracts executed since September 1, 1957, as a group involved exploration for 15 different minerals, and covered projects located in 21 States and Alaska. A total of 1,002 contracts had been canceled or terminated as of August 31, 1958, leaving in force 157. Of these 1,002 contracts, 74 were canceled without any authorized work having been performed; therefore, the Government did not make any disbursements on them. The remaining 928 terminated contracts had an aggregate estimated cost of $37,789,552, with Government participation set at $23,823,060, but the actual cost to the Government was only $16,653,165.

Certifications of discovery or development and royalty agreements

From the beginning of the program through August 31, 1958, the DMEA certified 344 projects as discoveries or developments, 40 of the certifications being made in the past 12 months. Important ore showings have been reported on 20 other projects which may eventually be certified when sufficient data have been obtained to evaluate the ore showings. Of the 344 certified projects, 326 have been terminated or compelted, and 18 are still in operation under DMEA contracts. The total estimated cost of these 344 certified projects, including 2 for which no Government funds were disbursed, was $22,140,357 of which the Government's estimated share was $13,909,999. To date, however, the Government has disbursed only $11,229,278 on them. These 344 certified projects, located in 30 States and Alaska, covered a search for 25 strategic and

critical minerals and metals. All contracts provide for payment of royalties if the projects are certified. Also, under certain conditions, provisions are incorporated in some contracts to provide for royalty payments even though the projects are not certified. As of August 31, 1958, the DMEA had entered into 64 contracts calling for royalty payments regardless of certification.

Repayments

In the period September 1, 1957, through August 31, 1958, repayments of the Government's contribution through royalties on production amounted to $643,515, making a cumulative total of such repayments in the amount of $2,627,463. Operators on 35 projects have repaid in full the sum advanced to them, aggregating $689,200 and 239 others have made royalty payments. Of the 374 projects on which royalties have been paid, 247 have been certified and 20 others are paying under royalty agreements.

The production on which royalties have been paid to date is estimated to have had a gross value to the operators of approximately $53 million. The gross value of the recoverable minerals in the potential are reserves inferred on the 344 certified projects is estimated to be in excess of $480 million at current market prices.

NEED FOR THE PROGRAM

Comprehensive statements on the need for the program administered by the Defense Minerals Exploration Administration have been included in all of its previous annual reports printed as appendixes of the annual reports to the Congress by the Joint Committee on Defense Production. These statements, along with other data included in the reports, provide a history of the defense minerals exploration program from its inception in mid-1951. Therefore, no extensive review of the need for the program during the life of DMEA, now terminated, seems necessary in this report.

In brief, this program to stimulate increased domestic exploration for strategic and critical minerals, initiated during the period of Korean hostilities, has had two objectives. One was to help assure adequate supplies of ore for production of metals to meet requirements of current national defense programs, first in the Korean emergency and later in the period of sustained military preparedness. The other was to help assure sufficient ore reserves for an adequate component of the Nation's mobilization base for a more extended period of time in the future. The program has contributed significantly to the attainment of both of these objectives. The widespread interest of industry in the program and the breadth of exploration activity which the program helped to stimulate are indicated by the facts that applications were received from 43 States and Alaska and that contracts were executed for projects in 35 States and Alaska.

During the Korean emergency, demand for minerals essential to production of materials and equipment for the Armed Forces and for the expansion of defense-supporting industry led to the expansion of mineral production facilities and increases in supply from existing sources, both domestic aand foreign. Many of these needed expansions in mineral facilities and supplies were stimulated by financial aids and incentives, including purchase programs, authorized by the Defense Production Act, the granting of accelerated tax amortization for facilities, and procurement of minerals for the national stockpile.

With the termination of fighting in Korea and the completion of major expansions in mining and mineral processing facilities, the supplies of most minerals became adequate not only for military and atomic energy programs but also for the needs of the growing economy. As time passed, the stockpile goals for nearly all of the strategic and critical metals and minerals were achieved. These developments resulted during the last couple of years in an abundant supply of all but a very few minerals for current defense and nondefense needs. At the same time, lower military requirements for certain basic metals were being forecast as new concepts of warfare were being translated into material requirements. There remained only a few minerals for which there was a clear, measurable, short-term supply objective yet to be attained in the interest of national defense.

Although it was generally recognized that a continuing program of exploration is essential to the long-term security of the United States with respect to mineral supply, the impossibility of projecting direct military requirements over a span of many years made it exceedingly difficult to identify a substantial group of minerals whose long-range supply position in relation to national defense requirements would justify their inclusion in a program oriented solely in meeting the demonstrable needs of national defense.

In view of this situation, it became apparent that there was need for a re-evaluation of the DMEA program as one conducted under the authority of the Defense Production Act and financed by the borrowing authority provided by that act. In its seventh annual report, submitted to the Congress in January 1958, the Joint Committee on Defense Production recommended that defense needs should be defined in order to make an accurate distinction between these and nondefense needs in administering the minerals exploration program. In his letter of February 14, 1958, commenting on this recommendation, Acting Secretary Chilson advised the committee that after discussion of this matter with the Office of Defense Mobilization, it was agreed that the Department of the Interior should seek legislative authority and its own appropriations for continuation of the DMEA type of program.

Acting Secretary Chilson also said in his letter that accordingly, the long-range minerals program which was submitted to the Congress during June 1957 contained a proposal along this line and that the administration was sponsoring legislation which would grant the necessary authority to the Department. On April 28, 1958, in testimony before the Senate Interior and Insular Affairs Committee, Secretary Seaton urged early action upon the administration's proposal, as one of several features embodied in S. 2375, to provide continuing financial assistance in the exploration for new ore bodies. In his statement, the Secretary pointed out that the measure was not designed to bring new properties into quick production, but rather it was intended to encourage long-range exploration to discover major new commercial ore bodies for 10, 20, or even 30 years hence. He stated that in the opinion of the Department of the Interior, the expansion of exploration is a most important long-rang objective for the Nation to insure an adequate supply of basic minerals for future requirements. Subsequently, S. 3817, which dealt exclusively with a program for the discovery of mineral reserves by encouraging exploration, was introduced and enacted. As previously mentioned, it became Public Law 85–701 upon approval by the President on August 21, 1958.

The authority provided by Public Law 85–701 and the funds available for the first year of the new program are believed to be adequate to assure availability of assistance on new exploration projects aimed at finding additional reserves of the few minerals for which known defense requirements indicate that increased supplies would be desirable. In addition, the new program will encourage operators to explore for a number of basic minerals essential to the long-range security of the Nation.

SMALL BUSINESS PARTICIPATION IN THE PROGRAM

Statistical analysis of the DMEA program shows that it appealed to small business which was especially atracted to highly strategic minerals not found in the United States in deposits of sufficient size to be of interest to large companies. A large number of small operators, including individuals, partnerships, and corporate enterprises, participated in the program. These small operators were given maximum encouragement because of the urgent need for the scarcer strategic and critical minerals and the importance of this group in the mining industry. Approximately 60 percent of all the DMEA contracts called for expenditures of $25,000 or less and about 43 percent of them provided for the operator to spend less than $3,000 of his own funds, or furnish an equivalent amount in the value of his own labor, supervision, or equipment to complete the contract. Based upon financial standing, annual production, number of employees, and prominence in their particular field in the mineral industry, in excess of 80 percent of the participants were classed as small business.

STATISTICAL SUMMARY OF PROGRAM

The tabulations which follow give a complete statistical summary of the DMEA program through August 31, 1958. The tables included are listed below.

I. DMEA activity September 1, 1957–August 31, 1958.

II. Recapitulation of DMEA operations from inception of program and status as of August 31, 1958.

III. Dollar value of DMEA Contracts, Government Participation and Disbursements, with Data on Amendments, through August 31, 1958.

IV. Distribution of DMEA contracts in force, by commodity, State, and region as of August 31, 1958.

V. Disbursements and repayments on DMEA contracts, by region, through August 31, 1958.

VI. DMEA projects terminated and certified—Commodity distribution—through August 31, 1958.

VII. DMEA projects terminated and certified—State distribution—through August 31, 1958.

Some of these tables present summary data by DMEA region. The five regions and the States included in each region are shown below.

Region I: Idaho, Montana, Oregon, Washington, and Alaska.

Region II: California and Nevada.

Region III: Arizona, Colorado, Nebraska, New Mexico, North Dakota, South Dakota, Utah, and Wyoming.

Region IV: Arkansas, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, and Texas.

Region V: Alabama, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

TABLE I.—*DMEA activity Sept. 1, 1957–Aug. 31, 1958*

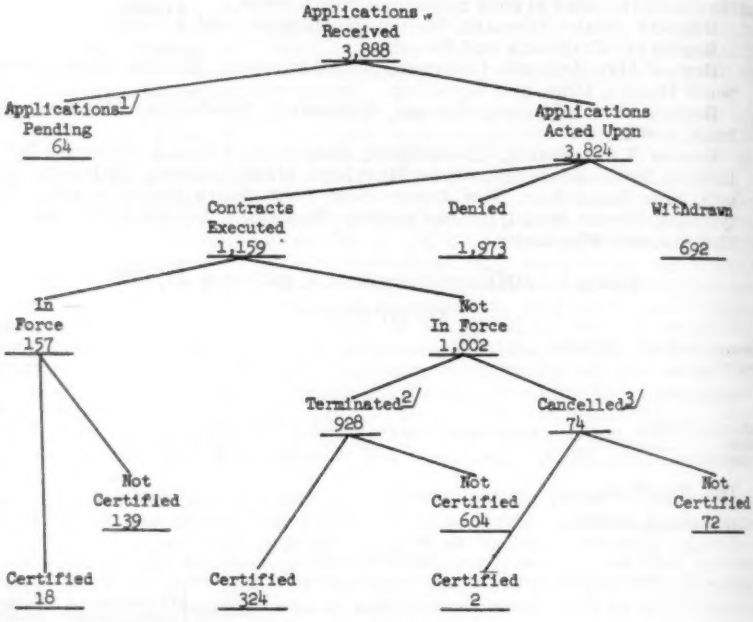
APPLICATIONS

	Number
In process as of Aug. 31, 1957	137
Received	255
On hand	392
Contracts executed	104
Denials	184
Withdrawals	40
Total dispositions	328
Pending as of Aug. 31, 1958	64

CONTRACTS

	Number	Government participation	Value of contract
In force as of Aug. 31, 1957	181	$10,690,347	$17,958,132
New contracts executed	104	3,165,795	5,232,397
Money amendments executed		350,141	672,645
Total in force	285	14,206,283	23,863,174
Terminated	120	4,332,151	6,680,535
Canceled	8	107,980	155,233
In force as of Aug. 31, 1958	157	9,766,152	17,027,406
Projects certified	40	2,394,987	3,897,206

TABLE II - Recapitulation of DMEA Operations from Inception of Program and Status as of August 31, 1958



1/ Pending as of August 31 and held for new program.
2/ No more work will be done with Government financial assistance.
3/ No Government money spent.

TABLE III.—*Dollar value of DMEA contracts, Government participation and disbursements, with data on amendments, through Aug. 31, 1958*

A. CONTRACTS

	Number	Government participation	Value of contract	Government participation spent
In force and certified	18	$1,470,147	$2,596,136	$1,113,092
In force not certified	139	8,296,005	14,431,270	3,888,157
Terminated and certified	324	12,394,093	19,488,383	10,116,186
Terminated not certified	604	11,428,907	18,301,169	6,536,979
Canceled and certified	2	45,750	55,838	
Canceled not certified	72	1,186,123	1,925,319	
Total for program	1,159	34,821,094	56,798,115	21,654,414

B. CONTRACT AMENDMENTS, TOTAL PROGRAM

Total number	2,404
Number changing dollar amounts	215
Net dollar increase:	
Government participation	$3,764,657.37
Total value	$6,250,621.59

TABLE IV.—*Distribution of DMEA contracts in force, by commodity, State and region, as of Aug. 31, 1958*

Region		Number	Government participation	Value of contract	Percent distribution of Government participation
(a) Commodity:					
Asbestos		1	$7,260	$9,680	0.1
Cobalt-nickel		5	710,172	1,138,492	7.3
Copper		6	134,198	268,392	1.4
Fluorspar		4	78,891	157,782	.8
Lead-zinc		29	2,696,815	5,393,425	27.5
Lead-zinc-copper		20	2,350,262	4,700,738	24.0
Manganese		5	612,301	816,399	6.3
Mercury		15	722,921	1,012,699	7.4
Mica		11	54,199	72,264	.6
Molybdenum		1	255,250	510,500	2.6
Rutile		1	17,496	23,328	.2
Thorium		4	57,641	83,618	.6
Tin		1	44,038	48,931	.5
Tungsten		7	455,359	607,146	4.6
Uranium		47	1,569,349	2,184,012	16.1
Total		157	9,766,152	17,027,406	100.0
(b) State:					
Alaska	I	4	322,791	434,968	3.3
Arizona	III	2	51,651	98,400	.5
California	II	12	515,461	780,887	5.3
Colorado	III	28	1,093,351	1,768,626	11.2
Georgia	V	4	23,295	31,060	.2
Idaho	I	20	2,756,503	5,245,022	28.2
Illinois	V	1	19,596	39,192	.2
Kentucky	V	2	54,295	108,590	.5
Maine	V	1	71,019	94,692	.7
Missouri	IV	5	909,298	1,661,980	9.3
Montana	I	8	674,121	956,974	7.0
Nevada	II	7	178,272	298,492	1.8
New Mexico	III	4	401,930	737,930	4.1
North Carolina	V	9	66,542	112,473	.7
Oregon	I	5	75,057	107,684	.8
South Dakota	III	3	103,166	127,767	1.1
Tennessee	V	9	986,395	1,972,790	10.1
Texas	IV	3	86,707	136,236	.9
Utah	III	11	868,552	1,576,883	8.9
Virginia	V	2	39,955	68,248	.4
Washington	I	6	127,377	198,333	1.3
Wyoming	III	11	340,818	470,119	3.5
Total		157	9,766,152	17,027,406	100.0
(c) Region:					
I		43	3,955,849	6,942,981	40.4
II		19	693,733	1,079,379	7.1
III		59	2,859,468	4,779,785	29.3
IV		8	996,005	1,798,216	10.2
V		28	1,261,097	2,427,045	13.0
Total		157	9,766,152	17,027,406	100.0

TABLE V.—*Disbursements and repayments on DMEA contracts, by region, through Aug. 31, 1958*

Region	Disbursements	Repayments	Region	Disbursements	Repayments
I	$7,380,493.12	$807,055.65	V	$3,457,148.12	$359,483.35
II	2,710,927.60	610,699.15			
III	7,169,867.24	843,581.52	Total	21,654,414.38	2,627,462.68
IV	935,978.30	6,643.01			

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TABLE VI.—*DMEA projects terminated and certified—Commodity distribution through Aug. 31, 1958*

Commodity	Projects terminated (including certifications)				Certified projects terminated [1]				Certified projects in force			
	Number	Government participation	Value of contract	Government participation spent	Number	Government participation	Value of contract	Government participation spent	Number	Government participation	Value of contract	Government participation spent
Antimony	11	$366,372	$488,496	$286,069	4	$229,958	$306,611	$204,802				
Asbestos	18	545,591	606,211	249,408	4	110,025	122,250	88,908				
Beryl-mica	20	203,262	227,744	98,920	8	[2] 47,760	[2] 53,067	[2] 37,506				
Chromium	2	37,825	75,649	28,297	1	25,737	51,474	21,636				
Cobalt-nickel	8	846,944	1,211,712	444,677	2	448,343	640,490	253,668	1	$448,208	$739,800	$428,837
Columbium-tantalum	3	47,005	52,228	30,625	2	43,821	48,690	29,313				
Copper	40	1,438,698	2,877,397	1,016,019	15	826,943	1,653,885	672,981				
Corundum	1	32,400	36,000	32,400	1	32,400	36,000	32,400				
Fluorspar	15	236,147	462,291	145,577	6	113,208	216,414	86,851				
Graphite	1	925	1,850	889								
Iron	4	283,400	566,800	141,340	3	259,350	518,700	134,813				
Lead-zinc	157	5,838,427	11,683,554	4,367,020	60	[2] 2,811,563	[2] 5,629,773	[2] 2,386,371	6	653,100	1,306,201	510,827
Lead-zinc-copper	41	2,065,692	4,131,381	1,699,214	10	869,137	1,738,274	845,354	2	77,080	154,160	55,626
Manganese	23	644,185	880,300	386,957	11	389,545	540,780	266,387				
Mercury	27	1,260,338	1,680,449	882,875	11	688,687	918,249	616,920	2	105,180	140,240	20,491
Mica	278	1,307,363	1,598,614	962,165	66	405,356	484,949	356,927				
Monazite	5	106,452	122,759	76,237	4	80,509	93,934	61,973				
Platinum	1	24,300	30,000	16,812								
Rutile	1	15,675	20,900	15,209	1	15,675	20,900	15,209				
Sulphur	2	89,280	178,560	28,595	1	39,705	79,410	23,706				
Talc	1	29,267	32,519	11,662	1	29,267	32,519	11,662				
Thorium	5	109,516	122,626	75,089	2	34,669	38,526	25,851	1	14,157	18,876	9,911
Tin	4	437,310	485,900	389,060	2	404,910	449,900	358,174				
Tungsten	109	3,146,998	4,216,680	2,217,215	52	2,064,715	2,752,949	1,587,781				
Uranium	151	4,709,688	5,998,932	3,050,834	57	2,422,837	3,060,638	1,996,933	6	172,422	236,859	16,638
Total	928	23,823,060	37,789,552	16,653,165	324	12,394,093	19,488,383	10,116,186	18	1,470,147	2,596,136	1,113,092

[1] In addition to these formal certifications royalty agreements have been made with operators on 64 contracts having an aggregate cost of $8,745,960 with Government participation of $4,622,512.

[2] 2 projects which are classified as "cancellations"—i. e., no Government funds were spent—have been certified. The figures for these 2 projects are omitted as indicated from the distribution of certified projects terminated, but they are reported in item 2. Contract summary.

TABLE VII.—*DMEA projects terminated and certified—State distribution—through Aug. 31, 1958*

TABLE VII.—*DMEA projects terminated and certified—State distribution—through Aug. 31, 1958*

State	Projects terminated (including certifications)				Certified projects terminated [1]				Certified projects in force			
	Number	Government participation	Value of contract	Government participation spent	Number	Government participation	Value of contract	Government participation spent	Number	Government participation	Value of contract	Government participation spent
Alabama	6	$148,733	$266,986	$93,581	3	$135,858	$250,620	$90,399				
Alaska	16	1,074,957	1,383,053	760,783	6	622,817	740,443	519,546				
Arizona	35	1,038,899	1,635,937	570,306	16	574,752	977,963	387,075				
Arkansas	5	129,685	172,913	55,166	2	27,000	36,000	24,247				
California	49	1,836,828	2,669,754	1,240,294	21	1,042,207	1,562,874	897,139	2	$87,835	$136,720	$28,201
Colorado	100	2,412,855	3,609,008	1,729,707	43	[2] 1,267,023	[2] 1,732,515	[2] 1,097,598	4	95,458	170,724	69,796
Florida	1	15,675	20,900	15,209	1	15,675	20,900	15,209				
Georgia	18	105,223	129,721	65,249	5	35,912	46,646	27,925				
Idaho	65	3,486,076	6,155,349	2,610,700	26	2,054,417	3,573,860	1,642,044	2	325,515	651,030	284,628
Illinois	7	139,080	275,349	88,263	3	90,485	180,969	65,539				
Iowa	1	14,850	29,700	14,850	1	14,850	29,700	14,850				
Kentucky	2	33,937	67,874	8,842								
Maine						[3]	[3]	[3]				
Maryland	1	3,779	7,558	1,657								
Michigan	2	340,652	681,303	305,620	1	284,097	568,193	273,499				
Missouri	7	67,411	134,823	27,819	2	22,552	45,104	14,241	1	448,208	739,799	428,837
Montana	56	1,340,098	2,124,064	836,046	16	660,862	977,922	494,298	1	28,604	57,209	19,512
Nevada	55	1,371,486	2,565,302	1,210,938	23	899,198	1,538,714	736,062				
New Hampshire	4	23,274	26,110	18,125	1	4,059	4,510	1,772				
New Jersey	2	142,775	285,550	60,714	1	141,850	283,700	59,825				
New Mexico	27	1,358,345	2,137,907	810,054	10	400,880	676,662	331,140				
New York	1	8,265	11,020	6,751								
North Carolina	286	1,411,330	1,746,338	1,071,023	59	385,859	459,069	324,625				
Oklahoma	2	84,952	163,725	29,046								
Oregon	7	164,454	219,272	112,194	1	70,575	94,100	70,574	1	46,755	62,340	10,262
South Carolina	3	56,373	69,021	48,276	1	47,802	57,593	40,667				
South Dakota	21	231,828	274,658	100,789	8	85,699	106,242	49,669				
Tennessee	5	667,233	1,328,450	622,844	2	562,675	1,124,150	561,995				
Texas	5	216,469	292,089	91,894	1	60,000	80,000	46,465				
Utah	89	3,795,998	5,912,567	2,770,247	41	1,911,468	2,890,703	1,660,990	3	326,228	607,651	208,084
Vermont	4	177,811	248,342	150,831	2	81,941	113,882	72,229				
Virginia	14	181,491	340,057	122,698	2	42,450	65,100	17,065				
Washington	36	818,652	1,519,521	576,871	10	235,108	445,030	196,374	2	59,475	94,274	47,134
Wisconsin	15	363,440	729,583	275,985	10	344,420	695,543	267,150				
Wyoming	11	360,146	555,748	149,793	6	212,412	309,686	115,975	2	52,069	76,389	87,400
Total	928	23,823,060	37,789,552	16,653,165	324	12,394,693	19,488,383	10,116,186	18	1,470,147	2,596,136	1,113,092

[1] In addition to these formal certifications royalty agreements have been made with operators on 64 contracts having an aggregate cost of $8,745,960 with Government participation of $4,622,512.

[2] 2 projects which are classified as "cancellations"—i. e., no Government funds were spent—have been certified. The figures for these 2 projects are omitted as indicated from the distribution of certified projects terminated, but they are reported in item 2. Contract summary.

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United States Fish and Wildlife Service

The Bureau of Comercial Fisheries of the United States Fish and Wildlife Service is continuously engaged in planning and testing operations to insure production of fishery commodities in an emergency.

AUTHORITY FOR PROGRAM

Responsibilities of the United States Fish and Wildlife Service in this area of defense mobilization planning stem from Defense Food Delegation No. 2, Revision 1: Delegation of Authority With Respect to Fishery Commodities or Products, from the Secretary of Agriculture to the Secretary of the Interior and Defense Mobilization Order I–13 issued by the Director of the Office of Defense Mobilization.

The delegation from the Secretary of Agriculture, published in the Federal Register on March 19, 1952 (17 F. R. 2369), delegated to the Secretary of the Interior the priority and allocation authority under the Defense Production Act of 1950, as amended, with respect to the production of fishery commodities or products and, also, certain related claimant functions. Defense Mobilization Order I–13 (19 F. R. 7348), dated November 12, 1954, assigned to the Secretary of the Interior responsibility for the development of preparedness measures relating to specified industries and products, including fisheries' commodities or products as assigned by the Secretary of Agriculture.

When the former Defense Fisheries Administration was abolished on June 30, 1953, the Secretary of the Interior delegated to the Director of the Fish and Wildlife Service defense functions relating to the production of fishery commodities or products. This was done by Secretary's order No. 2726, dated June 30, 1953 (18 F. R. 3804). This delegation was continued in superseding orders which in effect were revisions of order No. 2726 until July 11, 1957. As mentioned in Secretary Seaton's letter to the chairman of the Joint Committee on Defense Production transmitting last year's annual reports, the recent reorganization of the Fish and Wildlife Service had made it necessary to change the delegation of defense functions from the Director of the Fish and Wildlife Service to the Commissioner of Fish and Wildlife. This was accomplished by Secretary's order No. 2822 (22 F. R. 5779), issued on July 11, 1957. The delegation has been continued unchanged in Secretary's order No. 2833 (23 F. R. 7554), issued on September 22, 1958, superseding order No. 2822. Under the supervision of the Commissioner of Fish and Wildlife, the Bureau of Commercial Fisheries carries on defense mobilization planning activities.

SUMMARY OF ACTIVITIES

Current defense mobilization plans contemplate that the following functions would be assumed by an emergency commercial fisheries agency during a national emergency:

1. Serve as claimant agency for the commercial fishing and fish processing industry with respect to critical materials and fabricated parts.
2. Serve as liaison between the commercial fishing industry and other defense agencies with respect to materials, facilities, manpower, and related functions essential to continued operation.
3. Represent commercial fishing industry with respect to deferment of essential personnel.
4. Develop recommendations with respect to programs of loans or other financial aids and incentives required to achieve any needed increase in supply of fishery products, and make recommendations on applications for such assistance.
5. Allocate raw fish and direct diversion of fishing fleets to the extent necessary.
6. Obtain and evaluate damage to comercial fish production and processing facilities, and plan with appropriate defense agencies for rehabilitation of facilities and resumption of production.

During the year, a simulated emergency commercial fisheries agency participated in the attack phase and Federal action phase of Operation Alert 1958. The planning that occurred during this exercise carried on in 1958 has been effective in developing programs and procedures which would assist the domestic fishing industry in maintaining the production of fishery products in a period of national emergency.

To develop an efficient organization, more training and greater participation in exercises such as Operation Alert 1958 is needed at the field level. If more emphasis is to be placed on planning for a national emergency, provision should be made for adequate staffing at the planning level.

Changes in the organization plan for an emergency commercial fisheries agency were made during the year to reflect the regionalization of the Bureau of Commercial Fisheries. Responsibility for direction of emergency activities in the field has been assumed by recently established regional offices.

The operations of an emergency commercial fisheries agency are related primarily to small-business enterprises since, with few exceptions, commercial fishing operations and processing of fish and shellfish are carried on by individual fishermen and small companies.

Because of the widely dispersed nature of the fishing industry, it is especially important that in event of a national emergency, there be a strong central and regional emergency commercial fisheries agency to help the industry make its needed contribution to the Nation's food supply.

The emergency commercial fisheries agency's programs for maintaining the production and processing of fishery products during a period of national emergency would be correlated with the overall program of the Department of Agriculture for providing an adequate supply of food. The activities presently being carried on by the Bureau of Commercial Fisheries involve the training of personnel in producing and processing areas so that in a national emergency, arrangements could be made to maintain the catch of fishery products and to carry on necessary processing activities so that catches could be made available to consumers.

GENERAL SERVICES ADMINISTRATION

GENERAL SERVICES ADMINISTRATION,
September 16, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production, Washington, D. C.
(Attention: Mr. Harold J. Warren.)

DEAR MR. CHAIRMAN: As requested in your letter of August 14, there is enclosed herewith a summary of the mobilization activities of the General Services Administration for the past year.

Sincerely yours,

EDWARD K. MILLS, Jr., *Acting Administrator.*

The mobilization programs administered by the General Services Administration have as their objectives (1) the continuity of agency functions during emergency conditions, (2) the performance of specialized tasks for other Government agencies under delegation of authority or by reimbursement for services, (3) administering the national stockpile of strategic and critical materials in accordance with established policies, and (4) administering Defense Production Act programs relating to metals, minerals, and other materials, together with such financial assistance as may be authorized.

The activities of GSA are discussed under the following headings:

Mobilization readiness programs:
- Mobilization readiness planning.
- Continuity of Government.
- Telecommunications.
- Preservation of essential records.
- Warehouse operation for emergency supplies and equipment.
- Procurement and inspection of emergency equipment.

Production programs:
- National stockpile.
- Materials expansion.
- Machine tools.
- Operation of Government-owned plant.
- Dispersal of facilities.
- Accelerated tax amortization.
- Loans and advances.

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AUTHORITY AND RESPONSIBILITIES

The mobilization readiness programs of GSA have been established in accordance with the policies and directives of the Office of Civil and Defense Mobilization and its predecessor agencies. The basic authorities on which these policies and directives are based include the following:

Federal Civil Defense Act of 1950, as amended.
Federal Register Act, as amended by Public Law 619, 84th Congress.
Executive Orders 10346 and 10660.

The basic authorities for the programs relating to production and productive capacity are:

Defense Production Act of 1950 and Executive Order 10480, both as amended.
Strategic and Critical Materials Stock Piling Act of 1946, as amended.
National Industrial Reserve Act of 1948, as amended.
Section 168 of the Internal Revenue Code of 1954, as amended.

The following are the responsibilities of GSA under the Defense Production Act of 1950, as amended, and Executive Order 10480, as amended:

1. Purchasing and making commitments to purchase metals, minerals, and other materials for Government use or resale, and performing or providing for inspection, refining, processing, transportation, and storage operations incident thereto.

2. Guaranteeing private loans to contractors, subcontractors, and others when necessary to expedite production and deliveries or services under Government contracts for the procurement of materials or the performance of services for the national defense.

3. Certifying to the Secretary of the Treasury or the Export-Import Bank of Washington the essentiality of making direct Government loans to aid in carrying out defense contracts, to the extent that such loans are a part of and in accordance with the terms of programs certified to GSA by the Director of the Office of Defense Mobilization (Defense Mobilization Order No. 1–7).

4. Installing additional equipment, facilities, processes, or improvements to plants, factories, and other industrial facilities owned by the United States Government, and installing Government-owned equipment in privately owned plants, factories, and other industrial facilities.

5. Encouraging the development and mining of strategic and critical metals and minerals in carrying out any program certified to GSA by the Director of the Office of Defense Mobilization (Interior Defense Delegation 1).

MOBILIZATION READINESS PROGRAMS

Mobilization readiness planning

The General Services Administration is developing plans to meet various possible emergency conditions, including an attack on the continental United States. Under section 2 of Executive Order 10346, each Government agency is required to prepare plans and programs for maintaining the continuity of its essential functions at the Seat of Government and elsewhere during the existence of a civil-defense emergency. This involves the creation of administrative mechanisms that can effectively carry out such plans and assure continuity of essential functions in an attack situation.

Continuity of Government

During the past year GSA has surveyed existing agency functions to determine which ones would be essential in the event of enemy attack. In addition, succession to command plans have been developed to assure maintenance of direction under emergency conditions. A number of activities under this program are discussed briefly.

Emergency relocation.—The GSA central-office relocation site, established at a relatively safe location accessible from Washington, D. C., has been continuously activated for the past year. It is operated by a small cadre of personnel whose functions are primarily the daily testing of communications equipment and the maintenance of essential records. The 10 GSA regional offices also have established relocation sites. These sites are operable during test exercises.

Executive reserve.—In January 1958 a program was initiated to establish a GSA unit of the national defense executive reserve. By the end of the calendar year the unit will be complete and a training program established for the five reservists selected for the program.

Communications corps.—A permanent GSA communications corps has been organized and trained during the past 6 months. The total strength of the central-office corps is 60, and staff offices and services in GSA are contributing personnel on a part-time basis. In addition, 16 employees are being hired in the vicinity of the relocation site to assure a minimum communications capability in the event central-office members of the corps are unable to reach the site in an emergency. Regional offices of GSA also have trained corps for emergency communications duties.

Damage assessment.—Damage-assessment teams have been organized and trained in the central and regional offices to assure a capability of estimating damage to GSA resources in the event of a nuclear attack on the United States.

Readiness testing.—During the latest Operation Alert tests, GSA conducted a comprehensive study of its capability to perform essential functions in the event of an attack on the United States. Approximately 500 GSA employees participated in the exercise. As a result there was a greater realization of the enormity and complexity of logistical support in an attack situation.

Motor-transport services.—The Motor Equipment Division in the GSA Federal Supply Service has been designated in the event of a national alert to establish and operate the motor-transport services between relocation sites.

Telecommunications

GSA has developed a plan to assure communication capability in an emergency for the civilian activities of the Government. The plan was developed upon request of ODM under its program memorandum X-13. As delineated in the plan, teletype-system stations serving major cities are to be strategically relocated. To date, 12 alternate relay centers have been established in nontarget areas and provided with protection against radioactive fallout. GSA proposes to complete the program as funds become available.

Preservation of essential records

The preservation of essential Government records includes the selection and protection of vital records, and the maintenance of a permanent Emergency Federal Register and Emergency Code of Federal Regulations. These vital records are essential to emergency and defense operations, and the objective is to keep the records current and available at the relocation sites and in usable form. In addition, the maintenance of some form of promulgation of Presidential and executive agency documents has been determined to be an essential element of continuity of Government operations.

Vital records.—At the request of ODM, the GSA National Archives and Records Service established standards and furnished staff work on the selection and protection of vital records. ODM Nonmilitary Defense Program Memorandum VI-2, March 23, 1954, and program memorandum X-1, December 23, 1954, directed agencies to transmit semiannual reports on the status of their indispensable records programs to NARS.

NARS has (1) established standards for selection of indispensable records and has furnished advice and technical assistance on duplicating, shipping, and storing vital records; (2) published a records management handbook entitled "Protecting Vital Operating Records"; and (3) established a depository suitable for the storage of indispensable records. Each Federal agency has developed and maintained a program for the protection of vital records so that such records will be available at the time and place they are needed. Semiannual reports are received and evaluated by NARS, which then reports to OCDM on the overall program.

This program has been integrated with other emergency and relocation programs so that: (1) Agencies are operating continuing programs for selecting, shipping, storing, and keeping current the records needed in emergency operations; (2) coordination and review are carried out by NARS and reported on to OCDM; and (3) periodic review of uses made of the records during Operations Alert have kept the program current.

The reporting system needs broadening to include field reporting, and field and headquarters reporting need to be coordinated. New directives and a new reporting form for use by both headquarters and field offices have been drafted and are ready for issuance.

Emergency Federal Register and Code of Federal Regulations.—The President is authorized by the Federal Register Act (70 Stat. 337; 44 U. S. C. 305 (c)) to suspend publication of the Federal Register during an emergency period and is required thereupon to establish an alternate system or systems for promulgating, filing, or publishing executive agency documents.

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The GSA National Archives and Records Service has proposed two plans for an alternate system. Plan I is under consideration: central publication of the Emergency Federal Register at a relocation site with provisions for nationwide field publication and distribution. Plan II has been approved: abandonment of central publication with responsibility for promulgation and dissemination resting entirely on issuing agencies. A permanent employee has been installed at OCDM relocation site in expectation that some form of plan I will be approved. He will maintain standby Presidential and executive agency documents in an Emergency Code of Federal Regulations ready for prompt publication of the Emergency Federal Register.

The program has not been adequately tested. No test has been made of field participation. Some Presidential emergency documents have been received, but the agencies have not submitted any material. Improvement and approval of plan I are needed to provide for "key city" publication and distribution of the Emergency Federal Register. Field participation in an improved plan I should be tested under simulated attack conditions.

Warehouse operation for emergency supplies and equipment

GSA has provided direct operational and custodial support for about one-half of the OCDM (FCDA) emergency supplies and equipment program. This support is carried out by GSA under the terms of a memorandum of agreement dated February 7, 1956.

Under the agreement GSA has responsibilities for (1) securing warehouse space through lease or by use of Government-owned facilities; (2) providing necessary operational staff; (3) insuring adequate protection and security for facilities; and (4) servicing and maintaining the integrity of the medical stockpile. OCDM establishes stockpile policy, advances necessary operational funds, and furnishes technical guidance necessary to the storage and rotation of the many medical and technical items in storage. Accountability and the release of items from the medical stockpile, are functions vested in OCDM.

Since the inception of GSA support to this program, there has been a progressive increase in the value of inventory and number of facilities operated. As of June 30, 1958, GSA operated 24 separate warehouses for OCDM containing an inventory of approximately $98 million in emergency supplies and equipment for use during a national emergency or major natural disaster.

Each storage location has been selected after OCDM study of its logistical mission and strategic location for maximum protection against nuclear blast and hazards of radioactive fallout. The type and value of commodities stored requires that all stockpile items be kept under cover in clean, dry buildings of modern construction, capable of protecting approximately 40 percent of the items from freezing temperatures. Of the 24 warehouses being operated, 9 are Government-owned and controlled and 15 are leased facilities staffed and maintained by GSA employees.

Warehouse inventories include more than 400 items, such as blood plasma, intravenous injections, antibiotic and surgical instruments, and a wide variety of specialized equipment needed to establish and operate an emergency field hospital. Quantities of radiological instruments and engineering material also are stored and maintained as part of the OCDM inventory under GSA custody. Specialized storage techniques, and emergency operational plans, developed in cooperation with OCDM, insure swift distribution of these critical items to points of need.

GSA participation and support of this stockpile program has been financed by annual advance of funds from OCDM. In fiscal year 1958 GSA was advanced $1.9 million for emergency supplies and equipment stockpile operations.

Procurement and inspection of emergency equipment

During the past year the GSA Federal Supply Service continued to administer procurement contracts for OCDM (FCDA) and to provide quality control through inspection of equipment. The FSS National Buying Division and the Quality Control Division were responsible for these GSA activities.

Contracts were awarded late in fiscal year 1957 for $3.8 million worth of radiological equipment, most of which involved original development of prototypes and manufacture of instruments in quantity. These contracts brought the total of radiological equipment purchased and inspected by the Federal Supply Service in 1957 and 1958 to about $9 million. Additional quantities are to be purchased to bring the stockpile of this equipment up to the established objective. In addition to the radiological equipment, quantities of emergency hospital equipment, such as pumps and generators, have been inspected for quality control.

PROBLEMS IN ADMINISTERING MOBILIZATION READINESS PROGRAMS

Nuclear and technological developments introduce new problems that require current plans and programs to be reviewed and revised on a continuing basis. Emergency conditions could require GSA to provide certain logistical support under adverse conditions. Although the mobilization readiness programs placed in effect by GSA will be significant for standby in time of emergency, the possibility of enemy attack emphasizes the need for more comprehensive mobilization plans for the agency. A number of problems confronting GSA are listed.

Vulnerability of relocation sites to fallout.

Declassification of relocation sites to permit the development of plans to relocate families to the site.

Development and prepositioning of emergency delegations of authority to regional relocation sites.

Plans for radio capability at relocation sites.

Decontamination equipment for relocation sites.

Plans to salvage records after attack.

Development of emergency financial plans.

Clear definition of the responsibilities, functions, and status of the GSA Transportation and Public Utilities Service in order to effect the best utilization of their experience and know-how during an emergency.

Broadening of reporting system for vital records program.

Improvement and approval of plan for key-city publication and distribution of the Emergency Federal Register, and testing.

PRODUCTION PROGRAMS

National stockpile

The stockpile was established to provide stocks of materials to meet requirements for essential materials for a national emergency. It presently includes 75 strategic and critical metals, minerals, ores, and agricultural materials. In accordance with program directives and policy determination of the OCDM, GSA acquires materials for the stockpile and maintains and manages the materials in the stockpile.

The OCDM has established basic and maximum objectives for stockpile materials. Both objectives cover 3-year emergency period. The basic objectives assume imports (factored to reflect estimated supply risks) during an emergency period, but the maximum objectives discount all sources except North American and comparably accessible sources.

Purchase, storage, and maintenance of strategic and critical materials, including contractual obligations for materials.—The inventory of strategic and critical materials on June 30, 1958, consisted of $7,859 million worth of materials, at acquisition cost, including the national stockpile, Defense Production Act, CCC barter program, the supplemental stockpile, the Department of the Interior, and Federal Facilities Corporation inventories. The inventory under the Defense Production Act is listed in exhibit A.

Obligations for the strategic and critical materials stockpile program are shown in the table.

Obligations for the strategic and critical materials stockpile program, fiscal year 1958 and cumulative through June 30, 1958

[In thousands]

Item	Fiscal year 1958	Cumulative through June 30, 1958
Materials acquisition	$82,315	$5,436,568
Rotation	39,803	560,627
Storage and handling	17,536	152,090
Administrative and operating	3,264	36,590
Warehouse—construction		43,770
Subtotal	142,918	6,229,645
Less reimbursements	36,775	502,314
Total obligation	106,143	5,727,331

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Summary of availability of funds, as of June 30, 1958

[In thousands]

Item:	Amount
Public Law 117 (76th Cong.)	$70,000
Public Law 520 (79th Cong.)	5,801,412
Total available	5,871,412
Net obligations	5,727,331
Unobligated balance	144,081

Materials expansion

The programs administered by GSA under the Defense Production Act have been undertaken to encourage the expansion of productive capacity and supply of metals, minerals, and other raw materials. The programs are certified to GSA by OCDM and include (1) expansion contracts to increase the mining and/or refining capacity for materials such as aluminum, copper, fluorspar, lead, molybdenum, nickel, titanium, and zinc; (2) research contracts for the development of new or improved processes to produce materials more economically or efficiently and for the development of new sources of supply including substitute or synthetic materials; (3) domestic purchase programs to stimulate expansion of domestic production of these materials by small producers; and (4) the operation of the Government-owned nickel plant at Nicaro, Cuba.

Expansion programs certified to GSA by OCDM.—Metals, minerals, and machine tool programs certified to GSA totaled $7,735.9 million in gross transactions as of June 30, 1958. The report on borrowing authority, prepared pursuant to section 304 (b) of the Defense Production Act, as amended, presents in detail the working capital and probable ultimate net cost (PUNC) certifications for these programs.

GSA received no new program certifications from OCDM during the year ending June 1958. However, a number of changes were made in the programs that GSA administers as well as in the amounts of money certified for use in the programs.

The revisions in programs included (1) increases in allocation of borrowing authority as working capital to carry substantially greater Defense Production Act inventories of aluminum, copper, manganese, and nickel due to increased deliveries under option-type contracts and cessation of transfers from this inventory to the national stockpile; (2) extension of nickel-cobalt research program to permit an orderly transfer of the research activities from the Bureau of Mines research operation at Boulder City, Nev., to the Nicaro pilot plant in Cuba; (3) contract terminations in the titanium and molybdenum programs permitted adjustments of the respective certificates; (4) reduction in certification for the marine turbine and gear program; (5) increase in financial requirements to cover custodial, Treasury interest, and administrative expense.

Income and expense under the Defense Production Act.—Operations of GSA under section 303 of the Defense Production Act of 1950, as amended, resulted in a net loss of $33 million from all activities during fiscal year 1958, compared with a $26 million loss the previous year. A statement is included as exhibit B.

Machine tools

GSA maintains a reserve, under the National Industrial Reserve Act of 1948, of machine tools and industrial manufacturing equipment from which the essential needs of the Armed Forces or defense-supporting industries are supplied.

GSA also administers machine tool expansion programs certified by the OCDM under the Defense Production Act to assure maintenance of productive capacities for machine tools necessary to effect rapid industrial mobilization in an emergency.

Status of machine tool programs.—The number and value of machine tools included in these programs, and the number of leases in effect at the end of June 1958 are shown in exhibit C.

Operation of Government-owned plant

The Nicaro nickel plant in Cuba during the year ending June 30, 1958, produced 48 million pounds of nickel plus cobalt in powder and sinter oxide forms, thereby exceeding fiscal year 1957 production by 12 million pounds. Total pro-

duction since reactivation in 1952 amounts to 205 million pounds. Notwithstanding increased labor and material costs and interferences by Cuban rebels, average per pound production costs were held in line with those of the preceding year.

Metallic nickel ingots, containing 16.7 million pounds of nickel plus cobalt, were produced from Nicaro oxide at the Crum Lynne, Pa., refinery.

The railroad and mine expansion projects, to enable mining and processing of Cuban Nickel Co.'s royalty-free ore, were substantially completed at the year end, and small quantities of that ore had already been sent to the plant.

Activities of the Cuban rebel forces at both the plant and mine, including the kidnaping of plant officials and workmen, stealing equipment and supplies, burning railroad bridges and buildings and attempted dynamiting of the plant power supply, have seriously interfered with the operation.

In the past year, the market for all forms of nickel in the United States has changed from a state of critical shortage to one of substantial oversupply. Sales of Nicaro products for the year ending June 30, 1958, amounted to only 20.8 million pounds for about $14.8 million, as compared with sales of 32.8 million pounds for $22.4 million in fiscal year 1957. Also during the past year, Nicaro nickel in inventory has increased from about 8.5 million pounds to over 35 million pounds.

Due to inability to sell the Crum Lynne metallic nickel ingots in competition with the now plentiful higher purity cathode nickel, action has been taken to terminate the Crum Lynne refinery operation effective in December 1958.

Notwithstanding adverse market conditions, Nicaro's profit on sales during the year amounted to $3.5 million. Improvements in the steel and automotive industries should improve Nicaro's nickel sales substantially.

Dispersal of facilities

Defense Mobilization Order I–19 established a policy which encourages and requires, when appropriate, new facilities and major expansions of existing facilities important to national security to be located, insofar as possible, so as to reduce the risk of damage in the event of attack. This order, together with the letter of January 18, 1956, from the Director, Office of Defense Mobilization, places the responsibility with the head of the agency for determining whether the nature of the activity for which a new Federal facility is to be used will permit the use of a dispersed location.

Pursuant to this policy, GSA has requested and received determinations from the heads of the agencies which will use the facilities. These determinations cover buildings programed for construction by GSA, buildings programed by other agencies for which GSA is performing architectural and engineering services, and buildings constructed for lease to GSA. A report made to the Director, Office of Defense Mobilization, in March 1958, summarized the findings of 20 departments and agencies covering 12 buildings in 8 critical target areas. Six of these buildings contain 2,952,706 net square feet. The determinations for these buildings indicated that functions occupying 10,025 net square feet could be carried out from a dispersed location. Four buildings are special purpose in nature and the net square footage measurement does not apply. Two buildings, both with approximately 45,000 net square feet, each are being constructed for lease to GSA. One is adequately dispersed and the determination on the other was that functions could not be carried on at a dispersed location.

Protective construction.—Defense Mobilization Order I–19 also encourages, and when appropriate, requires the incorporation of protective construction features in new and existing facilities to provide resistance to weapons effects suitable to the locations of facilities. GSA has established standards for the enclosing walls and roofs to further improve potential shelter areas in buildings in critical target cities, pending the issuance by OCDM of firm criteria applicable to Federal buildings and the availability of funds to finance the cost of more elaborate protection. The standards will be applied to those buildings for which funds are appropriated to GSA and to those buildings constructed under the purchase contract program. They will be applied to buildings designed on a reimbursable basis when the client agency so requests. In addition, studies undertaken by GSA indicate (1) that the cost of providing shelter conforming to OCDM (FCDA) standards in a typical Federal office building is about $550 per person, and (2) that for an increase in cost of about 5 percent, the lateral resistance of the typical Federal office building studied could be increased to withstand a peak side-on overpressure of about 4.2 pounds per square inch.

The GSA Public Buildings Service has prepared tentative plans for typical new relocation facilities for the purpose of developing the requirements for levels

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of radiation resistance and personnel comfort, and estimating their cost. Drawings have been prepared for multiplate arch structures covered with earth to house facilities having populations of 24 persons, 156 persons, and 508 persons, respectively. Drawings have also been prepared for reinforced concrete structures to house facilities having populations of 156 and 508 persons.

Upon request of OCDM, GSA has undertaken all of the work required for the necessary research studies, drawings, specifications, cost estimates and construction for five prototype fallout shelters. The shelters are (1) 250-car, 5,000-person underground parking garage-shelter; (2) 1,000-person understreet fallout shelter; (3) 1,000-person subway fallout shelter conversion; (4) 500-person fallout shelter conversion in an existing industrial plant; and (5) 1,000-person fallout shelter conversion in an existing office-type commercial structure.

Other services.—Also upon request of OCDM, the GSA Public Buildings Service has undertaken all of the work required for the necessary research studies, drawings, specifications, costs, estimates, construction and maintenance of the Washington, D. C., metropolitan area warning system. The research studies, drawings, specifications, and cost estimates have been completed and construction work is well underway.

Accelerated tax amortization

During the year three certificates of necessity for metals and minerals expansion programs (in connection with which GSA makes recommendations to OCDM) were issued by OCDM for $16.7 million of accelerated tax amortization on facilities with a total estimated cost of $20.9 million. These certificates were for uranium facilities and were approved during the first half of fiscal year 1958. No certificates of necessity were recommended by GSA to OCDM for consideration during the latter half of the year. However, GSA recommended and OCDM approved a number of scope amendments and time extensions on existing certificates during the past year.

At the end of June 1958 there were 11 applications for certificates pending with GSA; these applications were for uranium.

Loans and advances

The program of financial assistance to defense contractors has continued including the making of advances, Government loans, and guaranteed loans.

Advances.—Advances for minerals and metals expansion were increased during the year by $18.8 million. However, there was no change in the total advances made for machine tool programs. Total advances for minerals and metals programs and for machine tools totaled $196.1 million at the end of June 1957 and had increased to $214.9 million at the end of June 1958.

Repayments by contractors of advances made to them totaled $191 million at the end of June 1958, compared with $139 million repaid through the end of June 1957, or an increase of $52 million for the year. The balance outstanding at the end of June 1958 was $21.9 million compared with $56.9 million at the end of fiscal year 1957.

Advances to contractors for minerals expansion projects and machine tools as of June 30, 1958

Status	Total	Minerals projects	Machine tools
Disbursed	$214,916,702	$161,135,000	$53,781,702
Repaid	190,993,774	137,378,158	53,615,616
Written off	1,995,335	1,869,196	126,139
Outstanding	21,927,593	21,887,646	39,947

Government loans.—No new loans for materials expansion projects were made by either the Export-Import Bank of Washington or the Defense Lending Division, Department of the Treasury (formerly Reconstruction Finance Corporation) during fiscal year 1958 on the basis of certificates of essentiality from GSA. No certificate of essentiality was issued by GSA during the period for loans under section 302 of the Defense Production Act.

Guaranteed loans.—Under authority of section 301 of the Defense Production Act of 1950, as amended, GSA guarantees loans for contractors under minerals and machine tool programs. During the year one new guaranteed private bank

loan was authorized by GSA in the amount of $270,000 to provide financing, for production of equipment for FCDA. Other activity during the year included a prepayment by a contractor of a loan balance of $487,500.

Five GSA loan guaranties were outstanding at the end of the 1958 fiscal year, under which borrowers could obtain up to $49.1 million. Loans outstanding totaled $48.9 million. GSA's guaranty liability on the outstanding loans amounted to $46.5 million.

Loans, guaranteed by GSA under section 301 of the Defense Production Act of 1950 cumulative through June 30, 1958

Commodity	Number of loans	Maximum amount authorized	Amount of loans outstanding	Guaranty on amount outstanding	Remarks
Aluminum	2	$120,750,000	$44,000,000	$41,800,000	Current.
Chrome	1	1,500,000			Closed loan.
Dolomite	1	2,625,000			Do.
Dosimeters	1	270,000	267,497	240,748	Current.
Magnesium	2	386,000			Closed loan.
Manganese	2	4,750,000			Do.
Columbium-tantalum	1	2,850,000	2,107,000	1,896,300	Current.
Tin-tungsten	1	374,400			Closed loan.
Pallets (for storage of quebracho-tanning extract)	1	60,000			Do.
Hospital equipment	1	850,000			Do.
Machine tools	14	31,212,000	2,563,304	2,563,304	Current.
Total	27	165,627,400	48,937,801	46,500,352	

NOTE.—Net income from fees since inception amounted to $4,555,690.

MOBILIZATION PROGRAMS AS RELATED TO SMALL BUSINESS

National stockpile

Helpful to small producers, a domestic purchase program was established for chrome ore and concentrates under the Strategic and Critical Materials Stockpiling Act. Operations under this program recently completed, were similar to the other domestic purchase programs. Many of the other materials acquired for the stockpile are purchased from small business.

Other stockpile programs which have assisted small business are the rotation programs for materials such as rubber and cordage fibers where many of the companies involved are small firms. In addition, most of the contracts for services such as inspection, testing, and maintenance operations are made with small business.

Materials expansion

Domestic minerals purchase programs.—Small producers of minerals and metals have been encouraged to participate in the GSA developed programs for expansion of domestic minerals production under GSA Defense Production Act programs. These programs currently cover beryl, manganese, mercury, and mica. Programs now completed were also initiated for asbestos, columbium-tantalum, and tungsten. (See exhibit D for statement of purchases under the Domestic Purchase Regulations.)

The terms and conditions of these programs have been designed to facilitate participation by small business. The Government agrees to buy, over a definite period of time, at fixed prices, generally above the market price, the production offered which meets specifications. Most of the participants are small producers who, in many cases, would not be in production at all except for these programs. As evidence of interest in these programs, approximately 200 certificates of participation have been issued to producers of beryl, more than 1,500 for manganese, and more than 2,000 for mica.

Independently owned metal fabricators.—In its contracts under the Defense Production Act for the expansion of production facilities for primary materials, GSA has made provision for mandatory allocation of a portion of the expanded production for distribution to nonintegrated or independently owned fabricators. Efforts are now being made to assure small business a substantial share of such material. An example of this is the contracts for expansion of facilities for the production of aluminum.

Machine tools

GSA has, during the past few years, administered a number of defense programs under the Defense Production Act designed to stimulate and maintain production of machine tools. Most of the companies involved have been small business concerns.

SUMMARY OF EFFECTIVENESS OF PROGRAMS

National stockpile

As of June 30, 1958, Government reserves of strategic and critical materials were equal to, or in excess of, estimated emergency requirements for most of the 75 materials currently on the stockpiling list. National stockpile inventories were sufficient to meet the maximum objectives for 50 materials and the basic objectives for an additional 13 materials. National stockpile inventories were below the basic objectives for only 12 materials. Of these, new procurement currently is limited to amosite asbestos, small diamond dies, and muscovite block and film mica.

Materials expansion

Expansion contracts executed by GSA in accordance with programs certified by OCDM have achieved substantial production increases as required to meet expansion goals. As a result of such contracts, expanded productive capacity will be available during an emergency for the production of such major metals as aluminum, copper, molybdenum, nickel, and titanium. Forecloseure actions are shown in exhibit E.

GSA has administered research programs certified by OCDM under the Defense Production Act for materials such as manganese, natural and synthetic mica, nickel, selenium, and titanium. Under these programs GSA negotiates and executes contracts with other Government agencies, private research organizations or private companies for the necessary research, monitors the research while in progress, and evaluates the results. One of the most important research programs during the past year was the program to develop a satisfactory substitute for strategic grades of natural block and film mica by reconstituting synthetic mica. Some progress has already been reported, and further research is continuing. If final results should be successful, one of the most serious materials problems would be solved.

Domestic purchase programs under the Defense Production Act have encouraged an increase in domestic production by small domestic producers. The program goals have already been met for asbestos, columbium-tantalum, manganese (at Butte-Philipsburg, Mont.; Deming, N. Mex.; and Wenden, Ariz.), and tungsten. The beryl, manganese (domestic small producers), mercury and mica programs remained open at the end of the fiscal year.

Machine tools

Machine tools in the national industrial reserve are being maintained to meet essential requirements of the Armed Forces or defense-supporting industries. The machine tool programs (pool order and tool lease programs) which were undertaken during the Korean emergency assured an increase in annual production of machine tools from $350 million to $1,250 million.

The elephant machine-tool program assures that facilities of producers of extremely large machine tools will be available for a 10-year period for increased production of such tools.

The M-day machine-tool program assures that there will be no lag in production of machine tools in an emergency.

PROBLEMS IN ADMINISTERING PRODUCTION PROGRAMS

The major problem now facing the GSA Defense Materials Service in carrying out mobilization programs is the maintenance and management of strategic and critical materials in the national stockpile and other inventories as well as the machine tools in the custody of GSA.

A problem of the GSA Public Buildings Service in effecting protective construction features in buildings under construction is the high cost involved and insufficient funds available for that purpose.

SUMMARY OF STANDBY PROGRAMS FOR ANY FUTURE EMERGENCY

M-day machine-tool pool program

This standby program certified to GSA by OCDM under the Defense Production Act would assure immediate use of machine-tool productive capacity in the event of an emergency, to avoid the usual timelag in providing machine tools necessary to make end items. As of June 30, 1958, a total of 83 contracts for 14,713 items costing $214.5 million had been accepted by the Government. Until the program is triggered by Government notice to the producers in an emergency, there will be no actual production, advances, or expenditures.

CHANGES IN ORGANIZATION

The special assistant to the Administrator (Nicaro project) was authorized to manage the nickel producing and processing facilities and activities administered by the Government in Oriente Province, Cuba. This was accomplished by delegation of authority No. 336, published in the Federal Register of May 3, (23 F. R. 2996). The delegation of authority entitled "Authorizing the Deputy Administrator of General Services To Manage the Nickel Producing and Processing Facilities and Activities Relating to the Nicaro Nickel Project in Oriente Province, Cuba," and dated May 25, 1956 (21 F. R. 3664), was rescinded.

In GSA regions 3 and 7, with regional offices in Washington, D. C., and Dallas, Tex., Defense Materials Service regional directors were established because the enlarged scope of DMS operations in these regions necessitated supporting the regional commissioners with responsible aid at the administrative level of competence for administration of DMS programs on a full-time basis. The domestic purchase programs represent only a portion of the total DMS workload is these regions. However, by establishing these positions, greater attention to the administration of these programs has been possible, with resultant increased efficiencies and dispatch in dealing with matters involving program participants.

AVAILABILITY OF FUNDS FOR DEFENSE NEEDS

Of the $2,100 million in total borrowing authority under the Defense Production Act, $2,092,766,000 has been allocated by OCDM as of June 30, 1958. Of the total amount allocated, $1,755 million has been allocated to GSA. Of the total allocation to GSA, $1,754,510,000 has been certified. Summary tables showing borrowing authority by agency follow.

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Allocation, certification, and balance of borrowing authority available under the Defense Production Act as of June 30, 1958

[In thousands]

Agency	Allocations and reserves	Certification		Repayment	Balance available for program
		Working capital	Probable ultimate net cost		
Under section 302:					
Department of the Treasury	$196,000	$386,745		$185,991	($4,736)
Export-Import Bank of Washington	35,000	45,121		12,746	2,025
Subtotal	231,000	431,866		198,737	(2,120)
Under section 303:					
GSA	1,755,000	746,413	$1,008,097		600
Department of the Treasury	1,600		1,600		
Department of the Interior	38,800		37,011	2,506	4,294
Department of Agriculture	66,366		66,366		
Subtotal	1,861,766	746,413	1,113,074	2,506	4,794
Total allocated	2,092,766	1,178,279	1,113,074	201,243	2,674
Unallocated by OCDM	7,234				7,234
Total available for new programs					9,908
Total borrowing authority	2,100,000				

Utilization of authority to borrow from U. S. Treasury, as of June 30, 1958

[In thousands]

Agency	Total borrowing authority allocation	Transaction with U. S. Treasury			Available for borrowing
		Borrowed	Repaid	Balance outstanding	
GSA	$1,755,000	$1,563,700	$125,000	$1,438,700	$316,300
Department of the Treasury (RFC)	197,600	276,355	109,845	166,510	31,090
Export-Import Bank	35,000	52,339	22,770	29,569	5,431
Department of Agriculture	66,366	58,633		58,633	7,733
Department of the Interior	38,800	30,000		30,000	8,800
Total	2,092,766	1,981,027	257,615	1,723,412	369,354

MANNER IN WHICH GSA MOBILIZATION PROGRAMS FIT INTO A DEFENSE PLAN

OCDM has the responsibility for coordinating mobilization readiness activities, and provides the broad guidelines and direction for GSA mobilization plans. Operational functions relating to such plans are developed and carried out by GSA.

GSA programs administered under the provisions of the Defense Production Act of 1950 and the Strategic and Critical Materials Stockpiling Act of 1946 are part of the overall mobilization plans developed by OCDM. Plants and equipment in GSA custody as part of the national industrial reserve are administered in accordance with determinations by the Secretary of Defense.

RECOMMENDATIONS OF THE JOINT COMMITTEE ON DEFENSE PRODUCTION

The Joint Committee on Defense Production recommended that GSA file with the committee a report for the put year ending April 1, 1957, setting forth information on production, sales and utilization, imports, and such other pertinent facts as shall be necessary to determine whether Government purchases of aluminum have increased due to imports. A similar report was requested for the period

beginning April 1, 1957, and ending December 31, 1957, and for each 30-day period thereafter until all put rights expire.

GSA has instituted a monthly reporting procedure setting forth all the pertinent facts pertaining to the put rights of Alcoa and Kaiser, who have contracts for the importation of primary aluminum from Canada. These reports are prepared on a cumulative basis and show comparative tender rights before and after contract amendments. In addition, the committee is furnished on a cumulative basis the quantities tendered and those accepted by GSA from Alcoa, Kaiser, and Reynolds.

EXHIBIT A.—*Inventory under the Defense Production Act (commodities in storage and transit), as of June 30, 1958*

Commodity	Unit of measure	Meeting stockpile specifications	Not meeting stockpile specifications	In transit	Total inventory	
					Quantity	Amount
Aluminum	Short ton	520,982	4,938	2,886	528,806	$269,407,326
Asbestos, chrysotile	do	1,499	850		2,349	2,102,575
Bauxite	Long dry ton	1,054,652			1,054,652	13,957,953
Beryl ore	Short dry ton	828	348		1,176	674,829
Bismuth	Pound	22,901			22,901	52,362
Chrome	Long dry ton	36	561,636		561,672	22,802,109
Cobalt and cobalt-nickel alloy	Pound	5,034,738	2,973,152	336,650	8,344,540	18,297,259
Columbium-tantalum	do	8,524,921	3,716,656		12,241,577	55,906,504
Malayan tin slag	do		2,401,525		2,401,525	1,496,692
Copper	Short ton	90,840	5,967	1,273	98,080	54,416,767
Cryolite	Short dry ton		38,968		38,968	10,760,467
Fluorspar, acid	do	19,700			19,700	1,394,453
Graphite	do		533		533	177,545
Lead	Short ton	4,008			4,008	1,519,109
Manganese, metallurgical	Long dry ton	892,322	1,201,354		2,093,676	119,037,991
Manganese electrolytic	Long ton	4,704			4,704	2,951,428
Manganese, synthetic dioxide	Long dry ton	3,090			3,090	2,310,898
Mercury	Flask	8,071			8,071	1,816,738
Mica	Pound	357,365	1,769,019	13,477	2,139,861	13,078,002
Nickel	do	80,378,563		1,226,169	81,604,732	68,479,536
Palladium	Troy ounce	7,884			7,884	177,313
Tin	Long ton		537		537	1,037,651
Titanium	Short ton	13,325	8,780		22,105	156,652,629
Tungsten	Pound, W	53,836,110	26,125,019		79,961,129	325,463,195
Total in storage and in transit						1,143,971,331

EXHIBIT B.—*GSA statement of income and expense, under the Defense Production Act, as amended July 1, 1957, through June 30, 1958*

Item	Combined	Rubber	Minerals and metals	Machine tools
Sales	$33,069,653		$33,069,653	
Cost of sales	30,275,764		30,275,764	
Profit on sales	2,793,889		2,793,889	
Other income:				
Interest	1,852,193	$503	1,607,761	$243,929
Rentals	1,548,737		601,897	946,840
Contract termination	1,200,000		1,200,000	
Other	359,693		354,427	5,266
Gross operating profit	7,754,512	503	6,557,974	1,196,035
Total expenses, by program	6,899,356	33,115	5,859,347	1,006,894
Net gain or (loss), by program	855,156	(32,612)	698,627	189,141
Other undistributed expenses	33,861,182			
Net (loss)	(33,006,026)			

EXHIBIT C.—*Status of machine tool programs, as of June 30, 1958*

Program	Number of leases	Number of machines	Value
Pool order program:			
1. Total orders placed		92,096	$1,253,440,[illegible]
2. Deduct cancellations due to expiration of contracts		5,281	98,221,[illegible]
3. Net orders		86,815	1,155,218,[illegible]
Deliveries (at contract price):			
(a) To industry		85,990	1,143,477,[illegible]
(b) To GSA (acquisition cost $10,437,691) [1]		825	11,741,[illegible]
Total		86,815	1,155,218,[illegible]
5. Disposal of tools delivered to GSA:			
(a) Sales to industry		414	5,141,[illegible]
(b) Transferred to machine tool lease program		11	210,[illegible]
(c) Subtotal		425	5,351,[illegible]
6. Balance available for sale (in storage)		400	5,086,[illegible]
Machine tool lease program:			
1. Total number of leases to industry	124	2,375	[2] 31,253,[illegible]
2. Deduct leases expired or terminated	116	2,282	29,786,[illegible]
3. Leases still in effect	8	93	1,466,[illegible]
4. Disposition of machine tools returned from lease:			
(a) Sales to industry		1,970	24,108,[illegible]
(b) Placed in storage		295	5,049,[illegible]
(c) Transfers to other programs:			
(1) Elephant machine tool program		12	427,[illegible]
(2) National industrial reserve		5	203,[illegible]
(3) Subtotal		17	631,[illegible]
(d) Total disposition		2,282	29,786,[illegible]
Elephant machine tool program:			
1. Machines acquired for leasing:			
(a) Transfers from machine tool lease program		12	437,[illegible]
(b) Purchases		309	4,546,[illegible]
(c) Subtotal		321	4,974,[illegible]
2. Deduct parts placed in storage			3,[illegible]
3. Total on lease	3	321	4,971,[illegible]
Net GSA investment in tool programs:			
1. Machines on lease	11	414	6,438,[illegible]
2. Machines in storage [3]		695	10,135,[illegible]
Total	11	1,109	16,574,[illegible]
Income from rentals:			
1. Fiscal year to date, July 1, 1957, to June 30, 1958			946,[illegible]
2. Cumulative through June 30, 1958			16,074,[illegible]

[1] Under terms of the pool order contracts, machine tools which the producer could not sell were acquired by GSA at a price which excluded the contractor's profit and selling expense.

[2] Includes machine tools transferred from pool order program; also, adjustment of $471,750 for capitalized costs transferred to program expense.

[3] Does not include parts amounting to $9,634 and 16 machines transferred at no cost to GSA from HEW.

EXHIBIT D.—*Purchases under domestic purchase regulations (Defense Production Act and Public Law 206, 83d Cong.), as of June 30, 1958*

Program	Termination date	Program limitation	Units	Cumulative purchases [2] through—	
				June 30, 1957	June 30, 1958
Asbestos [1]	Oct. 1, 1957	1,500	Short tons, crude No. 1 and/or crude No. 2.	1,499	1,499
			Short tons, crude No. 3	850	850
Beryl	June 30, 1962	4,500	Short dry tons, beryl ore	1,467	1,948
Chrome	June 30, 1959	200,000	Long dry tons, chrome ore and/or chrome concentrates.	150,715	197,444
Columbium-tantalum [1]	Dec. 31, 1958	15,000,000	Pounds contained combined pentoxide.	15,580,392	[3] 15,567,912
Manganese:					
Butte-Philipsburg, Mont. [1]	June 30, 1958	6,000,000	Long ton units, recoverable manganese.	4,106,196	6,017,434
Deming, N. Mex. [1]	do	6,000,000	do	6,215,258	6,215,258
Wenden, Ariz. [1]	do	6,000,000	do	6,108,316	6,108,316
Domestic small producers.	Jan. 1, 1961	28,000,000	Long ton units, contained manganese.	13,719,226	19,356,620
Mercury	Dec. 31, 1957	125,000	Flasks, prime virgin mercury.	5	9,428
Domestic	Dec. 3, 1958	[4] 30,000	do	0	7,332
Mexican	Dec. 31, 1957	75,000	do	0	766
Do	Dec. 31, 1958	[4] 20,000	do	0	1,387
Mica	June 30, 1962	25,000	Short tons, hand-cobbed mica or equivalent.	11,508	14,423
Tungsten [1]	July 1, 1958	3,000,000	Short-ton units, tungsten trioxide.	2,996,280	2,996,280

[1] Program completed through purchases.
[2] Quantities represent deliveries.
[3] Includes adjustments applicable to prior periods.
[4] Extension of prior limitation.

NOTE.—Chrome purchases are made under Public Law 520, 79th Cong. Columbium-tantalum regulation provided for both domestic and foreign purchases; report includes both. Excluded from this statement are the operations under Public Law 733, 84th Cong., which provides for purchases of domestic tungsten, asbestos, fluorspar, and columbium-tantalum.

EXHIBIT E. FORECLOSURE ACTIONS

The foreclosure sale of the Westmoreland Manganese Corp. project in Arkansas (contract GS-00P(D)-12263) was confirmed by court and all appeals were disposed of. The Government was held to have a prior lien upon all assets of Westmoreland. Net recovery by GSA as the result of foreclosure was $1,291,846.

Foreclosure sale of the United States Tin project (contract GS-00P(D)-520) was held at mine site, Lost River, Alaska, on October 30, 1957, under order of the United States District Court for the District of Alaska, Second Division. The Government purchased all the assets of United States Tin located in Alaska for $30,000. The assets of United States Tin located in Seattle, Wash., were sold under sale of the United States District Court, Western District of Washington, and GSA has received the net proceeds of the sale.

The foreclosure and sale of the assets of Mid-Continent Mining Corp. is pending in the United States District Court, Western District of Missouri (contract DMP-15). The contractor defaulted in repayment of advances totaling $325,000 under contract.

DEPARTMENT OF DEFENSE

ASSISTANT SECRETARY OF DEFENSE,
Washington, D. C., September 26, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States.

DEAR MR. CHAIRMAN: As requested in your letter of August 14, 1958, addressed to Hon. Neil H. McElroy, there is enclosed herewith a summary of the activities of the Department of Defense under the Defense Production Act of 1950, as amended, during the period September 1, 1957, through August 31, 1958.

Your decision to require only one quarterly report, as stated in your letter of September 8, 1958, is appreciated. The quarterly report will cover the period ending December 30, in accordance with the telephone agreement reached by our respective staffs.

Sincerely yours,

C. P. MILNE,
Deputy Assistant Secretary of Defense
(Supply and Logistics).

Activities of the Department of Defense which are related to the provisions of the Defense Production Act of 1950, as amended, included the following, during the year ending August 31, 1958:

Priorities and allocations
Expansion of production capacity and supply
- (*a*) Certificates of necessity
- (*b*) Guaranteed loans
- (*c*) Improvement of existing production capacity

Assistance to small-business firms
Assistance in labor surplus areas
Industry integration committee operations
Dispersal programs
National mobilization program planning
Mobilization material requirements and stockpile policy

PRIORITIES AND ALLOCATIONS

Authority.—The authority for the Department of Defense participation under title I of the Defense Production Act of 1950, as amended, stems from Executive Order 10480 and the issuance of delegation 1 by the Business and Defense Services Administration, which authorizes the Department of Defense to participate in the national priorities and allocations program in conformance with orders and regulations issued by the Business and Defense Services Administration. The Secretary of Defense, under revised Department of Defense Directive 4405.6, August 20, 1954, has delegated the priorities and allocations authority to the Assistant Secretary of Defense (Supply and Logistics) and the appropriate operational authority has been redelegated to the military departments and associated agencies.

Summary of activities.—Uniform policies relating to priorities and allocations matters within the Department of Defense are developed by the Office of the Assistant Secretary of Defense (Supply and Logistics) and these policies, together with guidance and detailed instructions to all operating elements and associated agencies, are disseminated through the DOD Priorities and Allocations Manual. Continuing liaison is maintained with the civilian control agencies, Office of Defense and Civilian Mobilization, and Business and Defense Services Administration, for the purpose of recommending actions, participating in development and clearance of orders and regulations, and cooperating in the preparation and implementation of policies relating to requirements, production, and distribution for approved military programs. Among the policies and procedures issued this year were those to implement (1) the superindustrial priority program rating, established by BDSA as directed by ODM, expanded to give preference to deliveries in support of DOD contracts for satellite programs, and antiballistic missile weapon system including related early warning, in addition to ICBM/IRBM; (2) the amended BDSA Order M–41, reserving the first 30 spaces on the numerical preference list for machine tool orders in support of the above top national priority programs; (3) the rescheduling of deliveries in the above programs and the cross scheduling of deliveries between the aircraft and missiles programs by DOD as authorized by BDSA; (4) the use of priorities and allocations in accordance with ODCM alternative mobilization plans which are designed to capitalize on available production as soon as possible in the event of war; (5) a revised BDSA official class B product list; (6) better data on the distribution of nickel through rated order identification by producers of controlled material who purchase primary nickel.

The Supply and Logistics staff acts as the claimant agency for all elements of the Department of Defense and associated agencies under approved procurement programs. Activities include (1) issuing periodic requirements calls; (2) reviewing and consolidating requirements for submission to ODCM; (3)

supporting the requirements before committees of ODCM when required; (4) receiving and distributing materials allocations; (5) preparing appeals for additional materials; and (6) arranging for transfers, adjustments, and returns of materials.

Priorities and allocations functions performed by the Supply and Logistics staff are designed to keep current military production, construction, and research and development programs on schedule and to maintain the national priorities system as a mobilization readiness measure. These functions include (1) redelegating authority to the military departments and associated agencies; (2) preparing and issuing uniform policies and procedures to govern the use of this authority within the Department of Defense; (3) recommending special actions to expedite deliveries to fulfill defense orders; (4) resolving production and distribution conflicts within the DOD; (5) maintaining consolidated controlled materials accounting controls; (6) recommending simplified procedures; and (7) participating with ODCM and BDSA in developing standby priorities and allocations systems for mobilization readiness.

The military departments continued to perform various activities in support of the priorities and allocations program to assure the fulfillment of military procurement programs and to provide for ready identification of military orders. These activities include (1) assigning DO and DX preference ratings to military contracts and orders; (2) preparation of departmental statements of requirements; (3) authorizing production schedules and making controlled materials allotments; (4) administering special distribution controls; (5) obtaining special priorities assistance for individual DOD contractors experiencing production difficulties; (6) auditing operations of DOD military establishments and selected contractors for compliance with instructions and regulations; and (7) collaborating in the simplification of current and standby operating procedures.

The initial instructions establishing standby priorities and allocations procedures to meet national disaster conditions caused by enemy actions were issued in the DOD Emergency Priorities and Allocations Manual, dated September 12, 1955. In June of 1958, this manual was reissued with expanded coverage.

The Department of Defense military production urgency system prescribed that a master urgency list containing the most essential end items required from production to carry out assigned objectives under mobilization conditions, be developed under the guidance of the Assistant Secretary of Defense (Supply and Logistics). In accordance with the revised DOD strategic and production guidance, revised instructions were issued to the military departments for submitting their essential items and components, needed from production, nominated for inclusion on the Mobilization Master Urgency List (M-MUL). The M-MUL will contain only those selected essential items and components together with minimum quantities to receive priority in the event of mobilization under specific alternative conditions.

Program effectiveness.—The priorities and allocations program continued its effectiveness in establishing and maintaining preferential treatment for the acceptance of defense orders; and provided adequate allocations of controlled materials for their fulfillment. In general problems requiring assistance because of material shortages or difficulties were resolved more expeditiously as a result of the procedures in use. The program has been used effectively for current procurement and mobilization planning by the following: (1) production reserves (set-asides) were maintained for the acceptance of defense-controlled materials orders; (2) the DOD Priorities and Allocations Manual was maintained to provide uniform guidance to all agencies of the Defense Department in the discharge of DOD responsibilities; (3) some additional simplification of the defense materials system was accomplished and maintained in mobilization readiness status as a standby program for emergency purposes; (4) priorities support to cover materials for maintenance, repair, and operating supplies and for installation of production equipment was continued, but only for defense contractors; (5) certain electronic component and heavy press schedules were reviewed by DOD prior to issuance of delivery directives by BDSA to assure preference to defense orders; (6) an alphabetical and numerical preference list was maintained to assist industry and Government in scheduling orders for machine tools for most urgent military production; (7) the DOD master urgency list of the most important currently procured items and projects was revised and reissued on February 20, 1958, and four supplemental changes were also made to provide continuing and up-to-date guidance; (8) work was continued with civilian agencies to simplify priorities and allocations procedures, and to adapt them for use under full mobilization.

During the year ending August 31, 1958, 1,411 cases requesting special assistance to obtain materials, components, end items, and production equipment to fulfill military contracts were processed. This was less than half the 3,981 processed in the preceding year. The assistance that has been given in the past year has supported the DOD approved programs.

Quarterly estimates continued as a part of the defense materials system. There has been a slight but steady decrease in these requirements each quarter, reflecting shifts in the distribution of procurement funds from the conventional to the newer types of weapons. The latter are in general more complex and involve lesser amounts of controlled materials per dollar of finished cost.

The Assistant Secretary of Defense (Supply and Logistics) has succeeded, by continuing to work with ODM and BDSA, in developing a simpler system, consistent with national policy, which will insure industrial support of military programs in event of full mobilization, with modifications for use in event of attack on the continental United States.

A priorities and allocations program adequate to secure acceptance and preference for defense orders of the United States and friendly foreign countries should be maintained. Such a program provides framework and procedures required in the event of an expanded emergency and in the early stages of full mobilization. The Director, ODCM, in April 1958, reaffirmed the existing Government policy that the defense materials system (DMS) is of substantial importance as (1) a device to support the present defense program; (2) a means of developing information on military requirements; and (3) a standby control measure. Thus the DMS will be kept in a state of readiness which will permit its immediate expansion in the event of an outbreak of hostilities. The military departments, APRA, EPRA, associated agencies and interested OSD offices were advised of this action by the Assistant Secretary of Defense (Supply and Logistics). The ASD (S. & L.) also urged the BDSA to launch a real campaign to publicize the revised DMS rules that result from the current review by the Interagency Mobilization Production Controls Committee for the reeducation of the industrial community.

EXPANSION OF PRODUCTIVE CAPACITY AND SUPPLY

(a) *Certificates of necessity*

Authority.—The Department of Defense participates in the accelerated amortization program by reviewing and making recommendations on applications for certificates of necessity which involve expansion of industrial capacity regarded by ODCM as being important in the support of the DOD program. The authority for this activity is contained in Executive Order 10480, section 168 of the Internal Revenue Code of 1954, and ODM Regulation 1A. This activity supplements title III of the Defense Production Act, as amended.

Summary of activities.—During the last 12 months, 369 applications for certificates of necessity were referred by ODCM to the Department of Defense for comments and recommendation. Comments and recommendations were furnished to ODCM by DOD on 269 applications during the 12 months ending August 31, 1958. The following chronology of events may be helpful in understanding the activity in the tax-amortization program.

(1) August 26, 1957: The Byrd bill became law—restricting the issuance of necessity certificates to facilities to produce new or specialized items or components thereof, and there are no suitable facilities, and research and development, or experimental services for the Department of Defense or the Atomic Energy Commission, during the emergency period.

(2) February 26, 1958: ODM Regulation 1A was approved.

(3) March 4, 1958: ODM Regulation 1A was published in the Federal Register.

(4) March 27, 1958: DOD Directive 4200.10 was issued.

(5) April 8, 1958: Distribution of backlog of cases (accumulated between the passage of the Byrd bill in August 1957 and the issuance of the ODM regulation in March 1958) to the military departments was completed.

The caseload activity reported is thus limited to the period April–August.

Program effectiveness.—The Department of Defense reviews and furnishes comments and recommendations concerning the proposed facilities required for production of new or specialized items, or research and development, and experimental services. During the relatively short period since the implementation of Public Law 85–165, there have been only a few certificates issued, mostly in the research, developmental, and experimental area. Thus a determination of the effectiveness of the program is somewhere in the future.

(b) *Guaranteed loans*

Authority.—The Department of Defense participates in the guaranteed loans program under title III of the Defense Production Act of 1950, as amended, and authority delegated to the Department under Executive Order 10480.

Summary of activities, year ending July 31, 1958

[Amounts in millions]

Status of applications	Number	Amount of loans	
		Total	Amount of guaranty
Pending as of July 31, 1957	2	$3.4	$3.4
Received	32	162.4	118.7
Authorized	26	154.4	113.6
Declined	3	2.2	1.9
Pending as of July 31, 1958	5	9.2	6.6

Number of loans authorized, August 1, 1957–July 31, 1958

Size of loans approved:	
Total	26
$10,000 and under	0
$10,000–$25,000	2
$25,001–$50,000	0
$50,001–$100,000	6
$100,001–$300,000	3
$300,001–$500,000	2
$500,001–$1,000,000	7
$1,000,001–$2,500,000	2
$2,500,001–$5,000,000	2
$5,000,001–$10,000,000	1
$10,000,001–$15,000,000	0
$15,000,001–$50,000,000	1
Over $50,000,000	

(c) *Utilization and improvement of existing production capacity*

Authority.—Department of Defense activities related to title III of the Defense Production Act of 1950, as amended, also include development and use of methods and procedures to utilize and improve existing production capacity.

Summary of activities: Machine tools.—The annual numerical and alphabetical preference list of Department of Defense contractors was published. The list, together with the interim changes, provides a means of channeling distribution of new metalworking equipment to producers of the most urgent military items in accordance with provisions of BDSA Order M–41, as amended. Specific contractors (with contract numbers indicated) are arranged both numerically and alphabetically on the list which is issued jointly by Department of Defense and the Business and Defense Services Administration to several hundred machine tool builders as a guide in scheduling deliveries. The Department of Defense continued its participation with Business and Defense Services Administration to obtain production equipment by directive and diversion action in order to expedite production of high-urgency military production and construction programs.

A central and current listing of idle military-owned or -controlled machine tools and related production equipment is maintained by the Production Equipment Redistribution Group (PERG) of the Department of Defense. The equipment comprising this inventory is reported to PERG by the three military departments and the General Services Administration and is made available for redistribution to qualified military and defense-supporting contractors. A total of 4,884 items of industrial production equipment were supplied to contractors in these categories from September 1, 1957, through August 31, 1958. During this same period, 9,310 items of tools and equipment were allocated in connection with the redistribution of central inventory items to defense producers. As of August 31, 1958, the inventory of idle metalworking machinery and other related production equipment comprised a gross total of 79,602 items as compared to 83,659 items a year earlier.

The Departments of the Army, Navy, and Air Force have initiated a program of analytically testing the machine tools contained in the Production Equipment Redistribution Inventory (PERI) in implementation of Department of Defense policy published in July 1956. The purpose of this policy is to provide guidance for the military departments to enable them to determine what equipment should be retained for mobilization by establishing standards from which the performance capabilities and operating standards of the equipment can be ascertained. Any tools not meeting these criteria are made operable whenever feasible, otherwise they are disposed of when repair or rehabilitation is not economically practicable. This program will assure a reserve of operable machine tools in the event of mobilization or other critical national emergency and will eliminate the storage and its attendant costs of items which if not analytically tested and in acceptable working condition might prove to be of little value when most urgently needed for use. This program was placed into effect in July 1956 and is to be completed over a period of 5 years.

During the past year the military departments were requested to conduct a review of all their currently approved package plants and standby lines in the light of the current strategic concept and resubmit justifications for those determined to meet the current criteria to the Assistant Secretary of Defense (Supply and Logistics) for review and reapproval. A package plant is defined as a complete complement of Government-owned equipment which is assigned to a specific program, and which, either as an entirety or when combined with other existing equipment, will be capable of producing at a specific level a military end item or component. A standby line differs from a package plant only to the extent that its equipment is already installed and in place for use. Although this review of previously approved packages and standby lines is still in process, it is expected that when it has been completed, a substantial quantity will be declassified and the tools made more freely available for redistribution to urgent current production programs by not permitting them to remain unjustifiably in package plant or standby line status for an indefinite period of time. The packages and standby lines which ultimately are reapproved will provide a reserve of available production equipment for which there are valid mobilization requirements in keeping with the current strategic concept.

Several inspection visits to machine tool storage sites were conducted during the past year. This is a continuing program established for the purpose of (1) checking the adequacy and accuracy of inventory records, (2) ascertaining the extent and efficiency of machine tool maintenance, and (3) determining the degree of compliance with existing Department of Defense directives and instructions as they pertain to production equipment activities. Visits to these installations revealed general improvement in conditions since the times of previous inspections. In some instances where records, maintenance standards, and other conditions were not satisfactory, the military departments were notified and the corrective action taken to either rectify the situation completely or to the extent of funds available. In most cases, however, the records and maintenance of tools were found to be very good.

Component capacity.—Under the direction of the OCDM Interagency Committee on Components, representatives of the Department of Defense continued to participate with the representatives of the Business and Defense Services Administration and other Government agencies in the joint studies of common component areas considered to be critical in the event of a national emergency. These components include large marine turbine gears; small instrument bearings; steel forgings and casting; aluminum extrusions; magnetron tubes; and other selected items. During the year, 10 studies were completed in which no deficiencies were found, bringing the total of 53 out of 65 areas under study. The remaining 12 areas showing deficiency are being further reviewed on the basis of present planning guidance to determine whether any action is indicated to avoid supply difficulties. In the case of jewel bearings for instruments, there is only one domestic source which could be relied upon to provide an adequate supply of these sapphire bearings in an emergency. This is the Government-owned plant at Rolla, N. Dak. To maintain this source of bearings after the Army, for budgetary reasons, withdrew its financial support, the ODCM decided that the bearings should be purchased by the General Services Administration for the stockpile. This is being done until a more satisfactory method can be found to finance this facility through sales of bearings to instrument producers in this country. ODCM has requested the DOD to require its contractors to procure jewel bearings from the Rolla plant. The military departments have agreed to, and are in the

process of issuing, procedures which will require military contractors to purchase jewel bearings from the Government-sponsored facility at Rolla, N. Dak., when such bearings are needed in products being produced for the DOD. This action will help to defray the cost of maintaining the Rolla facility for emergency use and will keep their products in line with the latest needs.

In the field of electronics, the Electronics Production Resources Agency, a staff agency of the Office of the Assistant Secretary of Defense (Supply and Logistics), has successfully eased or prevented serious delays to current military production programs. This has been accomplished by alining the electronics industry in advance for the production of electronics gear, principally components and parts, according to a pattern derived from combined Army, Navy, and Air Force requirements estimates for end items in which electronics devices are employed.

Another Office of the Assistant Secretary of Defense (Supply and Logistics) agency, the Aircraft Production Resources Agency, performs a similar function with respect to critical components essential for current aircraft production programs, in addition to exercising priorities authority over aircraft components (APRA B products) under a special delegation from BDSA.

The rapid rate of technological advancements in these two fields emphasizes the necessity of constant attention to production capabilities in the supporting components area. At the same time, such rapid changes tend to weaken the reliability of predictions for components and parts, thus complicating the advance preparedness of industry to support military requirements.

Planning with industry.—The Department of Defense has developed a new industrial planning program which is intended to replace the production allocation program established in MB 90–1 (Production Allocation Manual) and authenticated by DOD Directive 4005.4. The principles on which the production allocation program was based remain generally valid for the mobilization of industry from an undamaged base. However, the revised strategic concept requires the introduction of plans for military production from a severely damaged industrial base.

The new program provides a variety of planning systems suited to different categories of items. The procedure for each planning system is so designed that coordination of separate plans under any combination of the planning systems will be maintained at the plant level by a defense production planning officer (DPPO) to provide the management of each participating plant with a single point of contact for authoritatively integrating and coordinating all its operational plans in the event of an emergency. Records of current and emergency obligations are to be maintained on a plant-by-plant basis by the DPPO assigned such responsibility. Industrial management will look to their assigned DPPO to keep them informed on all aspects of mobilization activities of the Department of Defense and other claimant and planning agencies, including the Atomic Energy Commission, Maritime Administration, and Advanced Research Projects Agency.

The industrial planning program is designed to yield maximum preparedness for the planning effort expended and includes methods for planning in dispersed areas and with alternate sources. Emphasis is placed on the maintenance of production plans in a state of readiness which will permit immediate implementation.

Industry essentiality studies.—Under the Trade Agreement Extension Act of 1955, industry may appeal to the Government for protection against imports which threaten the national security by weakening the competitive domestic industry. Appeals filed by industry under this law require a determination of the essentiality of the appealing industry to current and mobilization plans of the Department of Defense.

During the past reporting period, studies were conducted and Department of Defense positions established and transmitted to the Director of Defense Mobilization on the domestic horological industry, cordage industry, dental burr manufacturing industry, and the jewel bearings manufacturing industry. Study is presently underway on the heavy electrical power generating equipment industry.

ASSISTANCE TO SMALL-BUSINESS FIRMS

Authority.—The small-business program is conducted under provisions of title 10, United States Code, chapter 137, the Small Business Act of 1953, as amended (recently enacted as permanent legislation, Public Law 85–536), and the Defense Production Act of 1950, as amended.

Summary of activities.—During the fiscal year 1958, the Department of Defense continued to carry on an active and vigorous program seeking to assure that small-business concerns were given an equitable opportunity to compete for defense business, and to encourage to the greatest possible extent increased participation by small-business firms in military procurement.

Small-business specialists in the major procurement offices and contracting offices throughout the procurement organization concentrated on assisting small business by actively searching for new sources; by including in military bidders' mailing lists the names of established small-business suppliers and such potential suppliers as have made acceptable application for inclusion in bidders' lists; by soliciting bids from a proportionate number of small firms in all cases where the entire bidders' list was not being solicited; by planning procurement in reasonably small, economically sound production lots, allowing sufficient time for the preparation and submission of bids, and establishing favorable delivery schedules, specifications and other provisions consistent with military requirements; and by extending to the maximum possible extent opportunities to submit bids for quantities less than the total procurement requirement.

Several publications were issued to assist small and other concerns in obtaining military prime and subcontract work. The first was a pamphlet, entitled "How to Sell to Agencies Within the Department of Defense," March 1958. In addition to general procurement policies, this pamphlet contains references to the appropriate procurement offices to contact for information concerning specified commodities. The second publication was a bulletin containing information on principal procurement offices, prime contractors and subcontractors engaged in the defense missile programs.

Program effectiveness.—Small-business concerns in fiscal year 1958 received military prime contract awards amounting to $3.7 billion or 64 percent of the volume that had been estimated as potentially suitable for small business. In the previous year, the dollar volume of awards to small business was almost the same, but the proportion of potential was 3.5 percentage points lower. This was due to increased efforts in 1958 to utilize small-business firms in the procurement of construction and soft-goods items which these firms can readily undertake as prime contractors. One measure of this increased effort is reflected by the joint set-aside program of the Small Business Administration and the Department of Defense. Under this program, partial or total prospective procurements set aside exclusively for bids by small-business concerns amounted to over $1 billion in fiscal year 1958, an increase of 45 percent over the amount set aside in fiscal year 1957.

Despite the additional emphasis on the small-business program, the proportion of procurement awarded to small firms declined to 17.1 percent in fiscal year 1958, from 19.8 percent in the prior year. Largely responsible for this decline was the variation in emphasis in the procurement programs in fiscal year 1958 as contrasted with fiscal year 1957. Contracts for aircraft, missiles, and other complex weapons, which provide only meager opportunities for prime contracts to small business, were a considerably higher proportion of the 1958 total, and conversely, construction and soft-goods contracts, including awards for petroleum, subsistence, and textile products, constituted a much lower proportion. Tables 1 and 2 show small-business data for fiscal year 1958.

In fiscal year 1958, for the first time, statistics on civil works prime contracts of the Army Corps of Engineers became available. Small business obtained 46.7 percent of such awards. In terms of military functions and civil works combined, small firms received awards of $3.9 billion, or 17.6 percent of the total.

Small-business firms also participated in military procurement through the medium of subcontracts. Subcontract reports for the first half of fiscal year 1958 indicate that small subcontractors received $1.8 billion in payments from 244 large prime contractors participating in the defense small-business subcontracting program. Data for the second half of fiscal year 1958 are not available. However, it is estimated that subcontract payments to small concerns by participating large prime contractors will aggregate $3.5 billion in fiscal year 1958.

TABLE 1.—*Net value of military procurement actions awarded to small and other contractors, fiscal year 1958*

[Amounts in thousands]

Procurement action category	July 1957–June 1958			
	Total	Army	Navy	Air Force
Total	$24, 196, 977	$5, 992, 632	$6, 991, 132	$11, 213, 213
Intragovernmental	531, 201	202, 871	99, 865	228, 465
For work outside the United States	1, 444, 060	740, 100	530, 281	173, 679
Educational and nonprofit institutions	394, 976	197, 648	89, 888	107, 440
Total with business firms for work in the United States	21, 826, 740	4, 852, 013	6, 271, 098	10, 703, 629
Actions of less than $10,000	1, 312, 028	642, 596	307, 601	361, 831
Actions of $10,000 or more	20, 514, 712	4, 209, 417	5, 963, 497	10, 341, 798
Small business potential	5, 829, 830	2, 733, 975	1, 877, 018	1, 218, 837
All actions of less than $10,000	1, 312, 028	642, 596	307, 601	361, 831
Actions of $10,000 or more offered to small business	4, 517, 802	2, 091, 379	1, 569, 417	857, 006
Actions of $10,000 or more not offered to small business	15, 996, 910	2, 118, 038	4, 394, 080	9, 484, 792
No known small-business source	13, 971, 326	1, 093, 379	3, 522, 146	9, 355, 801
Emergency procurement	1, 025	6, 854	11, 546	−17, 375
Maintenance of the mobilization base	880, 405	6, 854	8, 204	3, 730
Items under proprietory contract or standardized	508, 732	118, 865	349, 115	40, 752
Small business cannot meet quantitative or delivery requirements	635, 422	30, 471	503, 067	101, 884
With small-business firms	3, 729, 018	1, 800, 775	1, 171, 713	756, 530
Actions of less than $10,000	868, 895	436, 257	188, 153	244, 485
Actions of $10,000 or more	2, 860, 123	1, 364, 518	983, 560	512, 045
With other business firms	18, 097, 722	3, 051, 238	5, 099, 385	9, 947, 099
Actions of less than $10,000	443, 133	206, 339	119, 448	117, 346
Actions of $10,000 or more	17, 654, 589	2, 844, 899	4, 979, 937	9, 829, 753
Small-business percentage:				
Percent of small-business potential	64. 0	65. 9	62. 4	62. 1
Percent of total with business firms	17. 1	37. 1	18. 7	7. 1

TABLE 2.—*Net value of military procurement actions of $10,000 or more which were offered to small business firms, fiscal year 1958*

[Amounts in thousands]

Procurement action category	July 1957–June 1958			
	Total	Army	Navy	Air Force
VALUE				
Offered to small business, actions of $10,000 or more	$4,517,802	$2,091,379	$1,569,417	$857,008
Awarded to small-business firms	2,860,123	1,364,518	983,560	512,046
Not awarded to small business firms [1]	1,657,679	726,861	585,857	344,961
Small business did not bid	313,991	124,046	130,438	59,507
Small-business bid was not low	1,270,426	573,678	442,806	253,942
Small-business bid was not responsive	33,193	13,864	9,611	9,718
Small-business bidder not a responsible prospective contractor (ASPR 1-307)	6,171	2,350	1,039	2,782
Small-business bid not accepted for other reasons [2]	33,898	12,923	1,963	19,011
PERCENTAGE DISTRIBUTION				
Offered to small business, actions of $10,000 or more	100.0	100.0	100.0	100.0
Awarded to small-business firms	63.3	65.2	62.7	59.7
Not awarded to small-business firms [1]	36.7	34.8	37.3	40.3
Small business did not bid	7.0	6.0	8.3	7.0
Small-business bid was not low	28.1	27.4	28.2	29.6
Small-business bid was not responsive	.7	.7	.6	1.1
Small-business bidder not a responsible prospective contractor (ASPR 1-307)	.1	.1	.1	.3
Small-business bid not accepted for other reasons [2]	.8	.6	.1	2.2

[1] Data on reasons small business did not receive contract awards are not available for procurement actions less than $10,000 in value.

[2] For reasons which in most cases relate to quality or technical evaluation of the product.

ASSISTANCE IN LABOR SURPLUS AREAS

Authority.—The Department of Defense program of assisting labor-surplus areas and industries is conducted under the authority of the Defense Production Act of 1950, as amended, and as prescribed by Defense Manpower Policy No. 4.

Summary of activities.—Early in 1958, when unemployment in the United States rose sharply, the Department of Defense began to place increased emphasis on its program of assistance to labor-surplus areas and industries. Military departments were requested to seek out every opportunity to make labor-surplus area set-asides of proposed procurements. The Armed Services Procurement Regulation was revised to provide for placing the set-aside portion of a procurement at the highest rather than the average unit price of the non-set-aside portion, where multiple awards were involved in the non-set-aside portion. Major prime contractors were urged to subcontract their present defense production to firms in labor-surplus areas to the extent practicable. A new clause was developed for inclusion in future supply contracts under which the contractor agreed to use his best efforts to place subcontracts in labor-surplus areas and to give preference in subcontracting first to small firms in labor-surplus areas, second to other firms in such areas, and third to small firms not in labor-surplus areas. Consistent with national security interests, priority was given to initiating defense construction projects in labor-surplus areas. The Department of Defense provided assistance to chambers of commerce and similar civil organizations consisting of displays of military and industrial items to bring maximum business opportunities to firms in such areas. Armed Forces procurement conferences were held by the military departments to assist sponsoring groups in labor-surplus areas to conduct educational meetings with businessmen on how to do business with the military departments. A directory of firms in labor-

surplus areas was prepared listing firms qualified for and desiring to participate in defense production. A pamphlet, Defense Procurement in Labor Surplus Areas, was published outlining the steps to be taken by firms in labor-surplus areas in seeking defense procurement contracts or subcontracts.

Program effectiveness.—The above activities were very effective in bringing a substantial share of military procurement to firms in labor-surplus areas. A net total of $2,512 million in military supply, service, and construction contracts of $10,000 or more was awarded to firms in labor-surplus areas or industries in the quarter ending June 30, 1958, as compared with $1,122 million in the preceding quarter. In the entire first half of fiscal year 1958, net awards of $25,000 or more for supply contracts totaled only $157 million. (In the first half of the year, labor surplus area data were not obtained for suppy contracts between $10,000 and $25,000 or for service or construction contracts.) It is to be noted, of course, that by far the majority of this procurement awarded to firms in labor-surplus areas results from normal procurement processes rather than preference actions. Awards involving a set-aside or tie-bid preference amounted to $33.9 million in the last quarter of fiscal year 1958 as compared with less than $3 million for the preceding 3 quarters.

INDUSTRY INTEGRATION COMMITTEES

Authority.—The program is being conducted under the provisions of section 708 of the Defense Production Act, as amended, and upon approval of the voluntary agreements by the Attorney General.

Summary of activities and program effectiveness.—In the year ending August 31, 1958, an ammunition committee and the Army Aircraft and Maintenance Committee were abolished, leaving 16 Army-sponsored committees in existence, Nine are concerned with ammunition items, 6 with tank-automotive items, and 1 with quartz crystals. These committees have been very helpful in solving production and mobilization planning problems in connection with a number of military items.

DISPERSAL PROGRAMS

Authority.—Department of Defense Directive 5220.5, dated November 17, 1955, prescribes policy with respect to dispersal of industrial facilities consistent with the dispersion amendment of the Defense Production Act. This policy states that dispersal will be a key factor in determining additional sources for items of materiel or development, and a prime consideration in determining the locations of new industrial facilities, at the same time recognizing that factors such as cost, social and economic implications and other practical elements, such as requirement for timely delivery of vital products, must also be considered in any planned procurement.

In accordance with the provisions of Defense Mobilization Order I–19, dated January 11, 1956, the determination as to whether a facility is in a dispersed location is based on the standards developed by representatives of ODCM, Defense, and Commerce with respect to congested urban areas, and in addition, the standards developed by Department of Defense for nonurban locations with respect to proximity to key military installations and industrial facilities.

Summary of activities.—During the 12-month period from September 1957 through August 31, 1958, the Office of the Assistant Secretary of Defense (Supply and Logistics) received 286 dispersion inquiries from the Office of Area Development, Department of Commerce, requesting advice on whether proposed locations of important activities met dispersion standards with respect to proximity to key industrial facilities and major military installations. There was no appreciable difference in the number of inquiries received during this 12-month period (286), as compared with the previous year (283). There was, however, a substantial increase in inquiries received from private industry (from 63 to 127) which offset the marked decrease in tax amortization cases (from 73 to 5). The increase in the number of inquiries from private industry is indicative of management's interest in industrial dispersion, since these inquiries were motivated without benefit of tax amortization incentives. There was also a marked increase in dispersion inquiries from Federal agencies (from 4 to 108) which more than offset a substantial decrease in the number of dispersion inquiries from regional mobilization committees (from 143 to 46).

The source and number of dispersion inquiries received from September 1957 through August 1958 is summarized as follows:

	Total	Met standards	Did not meet standards
Total	286	252	34
Tax amortization	5	5	0
Private industry	127	106	21
Regional mobilization committees	46	45	1
Civil Aeronautics Administration	51	46	5
Federal Reserve Board	4	1	3
General Services Administration	26	25	1
ODCM	16	14	2
Department of Agriculture	11	10	1

NATIONAL MOBILIZATION PROGRAM PLANNING

Authority.—DMO I–12 charges DOD with responsibility for development and administration of those industrial mobilization readiness measures upon which development of a coordinated industrial mobilization program for the Government as a whole requires advice or action by DOD.

Summary of activities.—The objectives of production planning for periods of national emergency or mobilization were changed significantly with the issuance of DOD Directive 4005.13, dated March 27, 1958, which provided revised assumptions on the types of war, and the availability of industrial resources for which the DOD would plan. These revised assumptions specify that production planning will consider the eventualities of (1) a general war which would involve a severely damaged industrial base, and (2) a limited war with an undamaged industrial base.

(1) General-war planning under the revised assumptions emphasizes prewar readiness without major reliance on postattack production. Planning for postattack production has been limited to the production and maintenance of an extremely selective group of vital items. This planning considers dispersal, alternate sources and other reasonable measures which may be useful to assure continuity of production or to maximize deliveries from surviving plants.

(2) Planning for production during a limited war emphasizes industrial readiness for immediate adjustment to accelerate production.

Draft plans under each of these situations had been prepared by the Office of Defense Mobilization, predecessor to the OCDM, utilizing the advice and assistance of major Federal agencies. The DOD participants have assured, without compromising the security of military strategic and operational plans, that the ODM plans are in consonance with DOD plans. These draft ODM national mobilization plans have been tested in recent Operations Alert, for example, the plan for the situation in (2) above was tested in OPAL 1957 and for (1) above in OPAL 1958. The DOD participated actively in these tests as well as in the revisions in planning resulting from the tests.

The Department of Defense has participated in the OCDM project for the identification of essential civilian survival items. The assumptions underlying this project are in consonance with DOD planning.

DOD reviewed and suggested modifications in drafts of the Emergency Federal Register documents prepared by agencies which, under OCDM plans, would be given delegations of priorities and allocations authority, and authority under other, now-dormant, titles of the Defense Production Act.

MOBILIZATION MATERIAL REQUIREMENTS AND STOCKPILE POLICY

Authority.—Under DMO I–12, covering mobilization planning assignment to the Department of Defense, and DMO–V–1, on materials planning, the DOD is named as a principal agency on which OCDM relies for advice.

SUMMARY OF ACTIVITIES

(a) *DOD materials requirements for mobilization*

During the first half of calendar year 1958, the DOD substantially completed a review of its mobilization needs for some 150 materials. This study had been initiated in 1957 under the mobilization concepts in effect at that time. These did not yet include the feature of dual planning for general and limited war, but were on a general war basis.

These studies resulted in estimates which on an annual basis are substantially lower than estimates made in prior years and which had been based on older concepts of mobilization. The ultimate effect of these studies will be to ease the potential problems of wartime materials shortages and in the instance of stockpile materials should tend to reduce the objectives.

(b) Changes in stockpiling policies

Under the leadership of the Office of Defense Mobilization, the DOD participated in the review of stockpiling policy conducted during the first half of calendar year 1958.

This review included consideration of the conclusions and recommendations of a public committee which had been appointed by ODM to study this activity from the non-Government point of view.

The policy ultimately adopted by the executive branch and published in June of 1958 by the ODM included the following major points:

(1) Stockpile objectives will be established on the basis of a war period of 3 years instead of 5 years as previously used. This establishes a principle which the DOD had advocated for several years.

(2) Supply-demand studies leading to the establishment of objectives will be conducted both on the basis of general war and limited war and objectives will be established at whichever level is the higher. It is possible that for some materials the greater need for stockpiling will come in limited war.

(3) Emphasis will be placed upon stockpiling some of each material in the most advanced form of processing consistent with flexibility of use, so as to provide for any sudden increase in demand at the outset of an emergency.

(4) Stockpile procurement will be limited to the objectives based on security needs and will not be utilized solely as a means of maintaining the mobilization production base nor for domestic or foreign economic purposes. Conversely, stockpile excesses created by the general lowering of objectives will not be disposed of without assurance that industry will not be substantially injured thereby.

INTERSTATE COMMERCE COMMISSION

INTERSTATE COMMERCE COMMISSION,
Washington, D. C., September 2, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States, Washington, D. C.
(Attention: Mr. Harold J. Warren, clerk and counsel.)

DEAR SENATOR ROBERTSON: In compliance with the request contained in your letter of August 14, 1958, I am forwarding herewith a brief factual summary of The operations of the Interstate Commerce Commission under the Defense Production Act of 1950, as amended, covering the period September 1, 1957 to August 31, 1958.

This material is submitted for inclusion in the eighth annual report to Congress by your committee.

Sincerely yours,

KENNETH H. TUGGLE,
Commissioner.

I. AUTHORITY FOR THE CONDUCT OF ICC AND DEFENSE PROGRAMS

The authority under which the Interstate Commerce Commission conducted the programs described herein is as follows:

Defense Production Act of 1950, as amended (64 Stat. 798; 65 Stat. 131; 66 Stat. 296; 67 Stat. 129; Public Law 632, 84th Cong.).
Executive Order 10219 (16 F. R. 1983; 19 F. R. 3807).
Executive Order 10480 (18 F. R. 4939; 19 F. R. 3807).
Executive Orders 10660, 10421, and 10438.
Defense Mobilization Order I–7 (18 F. R. 5366, 6737).
Defense Mobilization Order VII–5 (18 F. R. 6408).
Defense Mobilization Order VI–2 (18 F. R. 8133).
Defense Mobilization Order I–15 (20 F. R. 921).
Defense Mobilization Order I–21.
Organization Order DTA, as amended (15 F. R. 6728; 19 F. R. 4160; 20 F. R. 4550).

II. SUMMARY OF EACH INTERSTATE COMMERCE COMMISSION PROGRAM

The activities of the Interstate Commerce Commission under the Defense Production Act of 1950, as amended, and as implemented by Executive orders, departmental orders, delegations, etc., have been primarily concerned with plans, programs, and procedures relating to the utilization of domestic transport, storage, and port facilities in the event of war or national emergency requiring full mobilization.

Following is an outline of ICC activities undertaken in this field during the period of this report.

A. Administrative readiness programs

1. *Continuity of Government.*—The consolidation of the FCDA and ODM into a new Office of Civil and Defense Mobilization (Reorganization Plan No. 1, 1958), coming as it did near the end of the fiscal year, brought promise of substantial improvement in this sphere, but, at the same time, caused confusion as to the continuing mobilization functions and interorganizational relationships of existing delegated agencies at both national and regional levels.

As a result of earlier evaluations of Govrenment mobilization activities indicating a serious need for extending national policy and guidance to local, State, and regional levels, the Commission began an educational program designed to improve preparations for emergency within its field offices. Representatives of the transport mobilization staff conducted pilot briefings on mobilization objectives in the Philadelphia and Denver offices and during the regional managers' conference at the Washington, D. C., office. Educational lecture material was developed and furnished field offices and plans were made for visiting all key offices in connection with the program. This latter was expected to have the twofold benefit of coordinating overall efforts and assisting the national office to better understand problems of the field.

The authority of ICC field personnel to participate in local and regional FCDA and ODM activities was extended with satisfactory results including closer cooperation between Federal agents at regional levels. However, as a result of the aforementioned consolidation of agencies, many problems of jurisdiction and interagency relationships at the regional level remained to be solved.

The Commission's ability to activate its relocation site and carry on essential functions at the agency headquarters away from Washington remained satisfactory during the year. Resignations and losses of trained relocation personnel, particularly in the communications section, threatened to impair operations. However, communications training was continued and actions were taken to improve procedure and to acquire additional equipment. No further action was taken to select another ICC relocation site pending decision as to a new site to be selected for an emergency transport agency.

2. *Operation Alert 1958.*—The Commission participated in both the May and July phases of Operation Alert 1958 and in preexercise planning relating thereto. The Assistant Director for Transportation, ODM, was advised on criteria and standards for transportation actions at both the local and Federal levels. Other preexercise preparations included the development of data for damage analysis, movement forecasts, and requirements estimates for use by field offices.

During the first phase, in May, the ICC conducted a communications and damage assessment training exercise at its relocation site. "Strike" information received via the communication system at the ICC departmental relocation site was posted to strike boards and plotted on national maps by a team of damage analysts. Summaries of the information prepared and further analyses of damage were completed in Washington. During the period June 2 through June 5 two members of the transport mobilization staff, together with the staff representative at the National Damage Assessment Center, worked as part of a transportation assessment team at the ODM relocation site. The ICC representatives on the team were responsible for developing a situation evaluation report relative to domestic surface transport and storage facilities and services. The resultant situation report was published by the Office of Defense and Civilian Mobilization as a part of the guidelines for phase II of the exercise.

The second phase, in July, was participated in at both regional and national levels by a full complement of ICC relocation personel, consultants, reservists, and industry advisers. Due to the fact that the agency was not advised, during the exercise planning stage, that it was expected to furnish personnel to participate on a limited scale in the activation of an emergency transport agency, the Commission conducted training and pursued actions according to its ODM approved essential functions and delegated responsibilities.

3. National defense executive reserve.—The ICC continued to build its unit of the national defense executive reserve by recruiting men of high qualifications for possible service with the agency in a future emergency. Membership more than doubled during the year, reaching a total of 83 (with 4 additional in process of designation) at the end of the reporting period.

Most of the Commission's reservists and a number of their sponsors attended a national conference on November 13–14, 1957, which was addressed by the President, Vice President, Secretary of State, Senator Capehart, and other prominent public officials.

On June 24, 1958, an all-day conference of the ICC unit was held in Washington, D. C., for the purpose of acquainting members with their roles in event of a wartime emergency. The briefing included lectures by prominent men in defense and transportation, a classified film, panel discussions on the mobilization roles of various segments of transportation, and discussions of current and projected transportation plans and programs.

Reservists played an important role in the Federal phase of Operation Alert 1958 with 12 in attendance at the ICC national and regional sites.

4. *Cooperative operations with other agencies.*—An extensive program of cooperation with other agencies with the view toward arriving at reliable estimates of wartime needs for transportation service was undertaken. Progress was greatest in cooperative efforts with the Department of Defense, and the Department of Agriculture. The Military Traffic Management Agency, DOD, developed regulations and plans designed to give the wartime transportation control agency requirements data it would need and to assure fullest assistance of the military departments in getting wartime traffic moved.

An interagency committe to study transportation problems in connection with emergency movement and diversions of food was established jointly by ICC and the Department of Agriculture. Substantial progress was made in developing a set of principles for handling emergency food shipments.

B. Industry readiness programs and projects

1. *Industry defense and physical security.*—Efforts to stimulate industry to take precautionary measures for their own defense continued during the period. The Commission's representatives on the Facilities Protection Board assisted in carrying out the functions under Executive Orders 10421 and 10438, and participated in the preparation and review of a manual entitled, "Standards for Physical Security of Industrial and Governmental Facilities," which was issued in March 1958.

The purpose of the manual is to provide general guidelines for management and the Government to protect against subversive activities which might be directed at industrial facilities vital to our national defense. Security measures outlined include methods which may be taken to protect against espionage, sabotage, and other subversive activities; against unauthorized entry; and for the prevention of fires, accidents, and contamination of food and water supplies. Technical standards, applicable to particular industries and types of facilities are to be developed by cognizant Federal departments or agencies in consultation with management. Segments of the transport industry were contacted with the view toward getting industry associations to undertake the development and issuance of facilities protection manuals for their respective modes of domestic surface transportation. A defense planning manual for the Great Lakes shipping industry, preparation of which was initially undertaken at the suggestion of the Commission, was issued by the Lake Carriers' Association in September. A supplement, identified as Part V: Atomic Defense Measures Aboard Ship, was also developed and issued during the period. A proposed manual, previously drafted for review and issuance by the warehousing industry, was reviewed by warehousing specialists for the purpose of revising and updating standards as necessary, to give consideration to changed concepts and current assumptions. As each mode of the transportation and storage industries perfected specific guidelines, companies or operating organizations within the various modes were encouraged to institute physical security programs, on a voluntary basis, and to become models for other industrial firms attempting to improve their facilities and procedures with respect to nonmilitary defense and security.

The Industry Evaluation Board called upon TMS to provide revised criteria and data to be used in comprehensive reevaluation of key transportation facilities of the Nation. Studies were begun. The revised criteria and data would be used in connection with both the facilities protection and the national damage

assessment programs. Activities pertaining to incentive programs within the jurisdiction of the Commission were limited to the consolidation and closing emergency movement and diversions of food was established jointly by ICC tax-amortization programs.

2. *Manpower and material requirements.*—Through membership on the Interagency Manpower Policy Committee, the Commission participated in the national emergency planning and assisted in the analysis and review of material developed as a result of field-level conferences on manpower mobilization planning. Some of the more serious implications of studies and a reevaluation of domestic defense involved the probable extent of manpower losses and the likely short period for mobilization of material resources for full effectiveness.

Conferences were held with representatives of other Government agencies and segments of the transport industry regarding the availability, distribution, normal requirements and anticipated emergency requirements for surface transportation and public storage facilities, equipment, and manpower. Activities in this area included the development of current and comprehensive inventory data regarding urban transit vehicles, school buses, intercity buses, and general merchandise and household goods public storage facilities. Particular emphasis was given to the concentration of manpower, equipment, and facilities in or near major industrial cities or areas.

Further studies and evaluations were scheduled in order to develop more comprehensive information regarding normal operating problems and significant difficulties which would result from sudden and unheralded emergency conditions, such as envisioned if a nuclear weapon attack should occur, and to make recommendations for current actions or operating practices which would strengthen the abilities of the transport industries to continue or to reweld a postattack national transportation system.

3. *Transportation damage assessment.*—The Commission had continuing representation at the National Damage Assessment Center during this period. Basic inventory data recorded by mechanical means at the site was revised and expanded. A representative listing of public general merchandise and household goods warehouses was developed and forwarded to NDAC for processing into the rapid computation system. As a further expansion of data for machine analysis and reporting, information pertinent to freezer and cooler public storage facilities was also incorporated into the system. The Department of Agriculture and the transport mobilization staff collaborated in developing the latter information.

In connection with damage assessment of transport services and equipment or facilities not readily adaptable to machine analysis, the staff prepared map overlays and standardized templates for use in hand damage analysis. This type of working tool together with current reference material, procedures, and evaluation aids were prepositioned at the Commission's relocation site where they would be available in any emergency or for operational tests.

Information on transport facilities, their location and other pertinent data, recorded in the National Damage Assessment Center and the center's rapid computation techniques are considered to be of great value. Reports from the center would be of particular value to those responsible for evaluating emergency situations and developing substitute or recuperative measures necessary to assure the continuity or rehabilitation of transport services. Based upon the experience and recommendations of technicians, industry representatives and executive reservists, transport information and data in the NDAC system (much of which has been placed there on an experimental basis) should continue to be improved and expanded.

C. Mobilization planning and emergency operations

1. *Mobilization and emergency plans.*—In planning for mobilization of the Nation's domestic transportation, storage, and port industries, the year was marked by changes in emphasis and direction. Overall guidance provided by the executive branch looked more and more to the serious possibilities of mass nuclear attack on the Nation with implications of radioactive fallout extending across the land and segmenting large areas of the country.

These assumptions tended to compress the time phasing of plans and to give new immediacy to action measures. In this regard, the ICC was abreast of the situation in having provided standby delegations to its field staffs and self-triggering mobilization orders, in summary form, to the transport industries. National planning assumptions also implied the need for stern measures to be exercised at all levels of government. In this ICC differed with some agencies of the executive branch as to the degree of mandatory controls to be exercised

over transportation, holding, for example, that State and local officials should not infringe Federal objectives for sustaining intercity and interstate transportation systems.

Government organizational changes during the year, culminating in the Presidential action to consolidate ODM and FCDA, also intensified many planning issues. The ODM Committee on Defense Transportation and Storage, which had been an effective instrument of interagency planning, was terminated with subsequent loss of a forum for periodical review by various agencies in the interest of widely accepted transportation plans and policies.

Besides participating in the updating of transportation sections of the two major national plans, the staff prepared and kept available an agency plan covering essential functions and actions required of the ICC under operational assignments in the national plans. The 12 self-triggering orders were brought up to date with amendments giving permanent-type delegations and assignments of permit authority to Government officers and to designated officers of industry associations; and all were distributed in summary form to the industry and others concerned for immediate use should they be required. In addition to these, a number of service orders and similar measures were selected and held on a standby basis for implementation if and when their need might materialize.

2. *Emergency transport agency concept.*—The concept of a wartime emergency transport agency as developed in recent years by the ODM Defense Transportation and Storage Committee envisioned a Federal control agency made up of operating divisions for the various modes of transportation: air, sea, domestic surface and storage, and ports. This coincided with industry affiliations and organization of the Government for dealing with transport matters. Under the impetus of planning assumptions for nuclear war, ODM advanced a new concept based on a command-type structure of national and regional agencies and organized on purely functional (e. g., noncomponent) lines. This concept was formulated with certain policy provisions to which ICC, in November 1957, took strong exception. Subsequently, planning for the wartime agency was advanced by ODM and the Department of Commerce without the participation and advice of ICC and other former members of the Defense Transportation and Storage Committee.

3. *Traffic movement studies.*—Studies designed to assess the probable traffic load (in passengers and commodities) to be imposed upon the Nation's transportation during wartime were begun during the year and showed considerable progress. This pilot effort started with an analysis of existing traffic-flow patterns as reflected in ICC waybill studies. From this, projections were made as to the probable movement of food and other survival items for a time of extreme emergency. The cooperation of Department of Defense, Department of Agriculture, General Services Administration, and others was received in making these projections and in developing procedures for obtaining more reliable data in the future.

Test data on traffic requirements injected into the national Operation Alert exercise revealed the importance of this effort in overall transportation planning and the extent of work yet to be done in obtaining reliable estimates.

4. *Highway traffic detour and rerouting plans.*—Plans for the rerouting of vehicular traffic around critical target areas was undertaken as a cooperative endeavor of the transport mobilization staff and the field staff of the Bureau of Motor Carriers. Fifteen plans, covering such major cities as New York, Chicago, San Francisco, Denver, Dallas, etc., were completed during the year.

In studies leading to the development of these plans, ICC field personnel gained valuable experience cooperating with local, city, and State officials. Many of the plans were either adopted or integrated into local plans for civil defense.

III. SUMMARY OF STANDBY PROGRAMS TO MEET ANY FUTURE EMERGENCY

The 12 self-triggering transport mobilization orders which have been placed in the hands of ICC field representatives and, in summary form, given to industry for immediate implementation in event of declaration of a national civil defense emergency, and the ICC reservist program, constitute the heart of the Commission's standby measures. In addition to these there are standby programs maintained by the Commission, which may now pass out of existence due to discontinuance of funds for the Commission's transport mobilization staff. Among these are: The traffic movement program (by which a forecast of emergency flow of commodities was maintained); the damage assessment program (by which an inventory and analysis of transport resources was maintained); the material

requirements program (by which the resource needs of the transport industry were regularly determined and kept available); the transport operations program (by which emergency routes and operating procedures of carriers were evaluated and kept up to date); and others relating to conservation of critical materials, security and plant protection, allocations and rationing, etc.

IV. TRANSPORTATION PROBLEMS RELATED TO THE OVERALL MOBILIZATION PROGRAM

National assumptions for a nuclear war, in compressing the time phasing of planning, have tended to emphasize dependence upon those resources which would be immediately available and usable in a postattack survival period. Insofar as materials are concerned, this has meant a shift in emphasis to manufactured end items and parts as opposed to long-term production stockpiles. Insofar as overall resources are concerned, this has meant a shift of emphasis to the services, particularly transportation and communications. More and more there is the realization that services must be kept operable or must be given priority in restoration if the Nation is to get back on its feet and eventually into large-scale productive effort leading to victory.

Such terms as "claimancy," "allocations," "priorities," "rationing" have never carried the same implication with regard to services as they normally have had when applied to material resources. Transportation service may not be stockpiled and parceled out as steel, copper, and other material resources may be. In the industrial services, the factor of time is vital. Therefore a requirement and an allocation of transport is not so much an amount of vehicles or facilities as it is an amount of space which may be utilized within a certain period of time to move persons and goods. When a priority user has obtained the required service, the facilities quickly pass to the priority service of other users. As basic as this may seem, it is essential to an understanding of how transportation relates to overall mobilization programs.

With regard to this relationship, the following points are made:

(*a*) The greatest concern in transportation over stockpiled resources is for end items of equipment or facilities such as passenger rail cars and prefabricated piers, and for fuels.

(*b*) The present transport mobilization base is perhaps weakest in rail due to present economic difficulties of that industry and to the expanded wartime load which would probably be placed on that service.

(*c*) With regard to rationing and control of materials for highway transportation, the needs of the entire automotive complex of the country must be considered.

(*d*) Transportation routes and systems have a higher recovery potential following attack than fixed industrial plants and terminals.

(*e*) Specific transportation priorities cannot be firmly established in advance. They must be determined on specific needs at specific points at the particular time of need.

V. MAJOR PROBLEMS CONFRONTING ICC

The major problem confronting the Commission with regard to defense mobilization activities is the question as to its role and responsibilities in this field following the denial by the 85th Congress, 2d session, of funds for continuation of delegated functions under the Defense Production Act of 1950, as amended. As of the date of the filing of this report, the transport mobilization staff, which has carried out the Commission's programs in this field, was dissolved and no clarification of Government agency transportation roles had been received from the new Office of Civil and Defense Mobilization.

DEPARTMENT OF AGRICULTURE

DEPARTMENT OF AGRICULTURE,
Washington, D. C., September 17, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States.

DEAR SENATOR ROBERTSON: In accordance with your request of August 14, 1958, we are pleased to transmit to you a report, Defense Activities of the United States Department of Agriculture from September 1957 to September 1958, for inclusion in your committee's eighth annual report to the Congress.

The report has been organized according to the outline suggested in your letter, and summarizes preparedness measures designed to carry out our responsibilities under the Defense Production Act and Executive Order 10480, as well as other defense-related activities.

Sincerely yours,

TRUE D. MORSE, *Under Secretary.*

I. DEFENSE MOBILIZATION PROGRAMS OF THE DEPARTMENT OF AGRICULTURE

Continuing its defense mobilization work, as authorized by the Defense Production Act and related legislation, the Department of Agriculture has carried out the following programs during the past year:

(*a*) Periodic evaluation of requirements and supplies of food (including fibers, tobacco, and oilseeds) and supporting nonfood materials and facilities.

(*b*) Identification and solution of any potential food supply problems, including analysis of regional food supplies and development of data and procedures for estimating local needs in an emergency.

(*c*) Cooperation with other agencies to solve problems which relate to items not completely under the Department's jurisdiction.

(*d*) Development of standby plans relating to the production, processing, and distribution of food and the domestic distribution of farm equipment and commercial fertilizer.

(*e*) Cooperating with the Office of Civil and Defense Mobilization in the development of stabilization measures as they relate to mobilization.

(*f*) Cooperating with the Department of Labor and other agencies with respect to manpower.

(*g*) Assisting the Office of Civil and Defense Mobilization in matters relating to stockpiles of strategic and critical materials.

(*h*) Providing guidance and leadership in the development of plans and programs to assure continuity of vital food facilities in event of attack.

(*i*) Development of plans to assure the continuity of essential functions of the Department in the event of attack.

In addition the Department has been engaged in planning and directing civil defense activities concerned with biological and chemical warfare against animals and crops; maintenance of adequate food supplies for attacked or support areas; and prevention and control of fires in rural areas caused by enemy attack. Other activities included participation in the test exercise Operation Alert 1958.

II. AUTHORITIES UNDER WHICH THE DEPARTMENT OF AGRICULTURE CARRIES OUT DEFENSE MOBILIZATION WORK

Defense mobilization functions have been assigned or delegated to the Secretary of Agriculture by Executive orders and directives under the Defense Production Act of 1950, as amended, the Universal Military Training and Service Act, the Reserve Forces Act of 1955, the National Security Act, the Export Control Act, the Strategic and Critical Materials Stock Piling Act, and enabling legislation of the Department.

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Executive Order 10480, issued under the Defense Production Act, delegated to the Secretary of Agriculture responsibility for the production and distribution of food. (Food is defined to include all commodities and products that are capable of being consumed by humans or animals, as well as fats and oils, naval stores, tobacco, wool, mohair, cotton, hemp and flax fiber until they lose their identity as agricultural commodities.)

Based on authorities stemming primarily from the Defense Production Act, Defense Mobilization Order I–9 assigns defense mobilization functions to the Department of Agriculture and provides the basic framework under which the Department facilitates and coordinates its defense and readiness planning. A work program was developed under this order and the section which follows is a summary of progress under DMO I–9.

III. Summary of Program Activities Under Defense Mobilization Order I–9

A. Periodic evaluation of estimated requirements (including military, export, and civilian) and supplies of food (including probable imports) as defined by Executive Order 10480, together with estimated requirements for supporting nonfood materials and facilities for the current period and for full mobilization

1. Requirements and supply estimates relating to food

The primary purpose of food supplies and requirements analyses is to determine the ability of the United States to supply the necessary food requirements in any type of an emergency period and to determine before they occur the areas where major food problems may develop. Even though considerable additional basic data are required to prepare satisfactory estimates of emergency food supplies and requirements, the preliminary data available, when used with reasonable assumptions, provide a basis for the determination of many of the Department's policies in regard to possible emergencies. They have been especially useful in determining food stockpiling policy, the adequacy of nonfood requisites and food processing capacity, and as an aid in the preparation of standby orders and priorities for use in an emergency for production and distribution of food. These data are also maintained at the Department's national relocation site for immediate use in the event of an emergency as well as in test exercises.

In response to a request from the chairman of the House Committee on Agriculture, a paper was prepared to compare the present national food situation with that at the beginning of the war emergencies of 1941 and 1950 (exhibit 1). This analysis indicates that current supplies of most agricultural products are as large or larger than those available in 1941 and 1950. Current stocks of perishable items are generally less than 5 percent of a year's supply, although stocks of other items are generally more than 20 percent of a year's supply.

Special summaries were prepared covering food stocks in refrigerated storage. These data show the man-days supply of food in each of 7 groups by States and for 99 target area cities. Consideration is currently being given to the feasibility of preparing similar data for nonrefrigerated food products. This would require the assembly of a substantial amount of data not now available for target areas and some data which are not available for individual States. This type of information would be valuable in appraising losses and estimating food supplies available during a post-attack period.

Analyses were made for individual commodities. Evaluation of essential requirements and supplies of sugar were continued throughout the year. Delivery and stock data were analyzed and sources of origin reviewed. Through a special study, total stock positions of retailers, wholesalers and industrial users were obtained and data utilized in reviewing requirements. The present supply situation is adequate.

A periodic evaluation was made of meat production and supplies (including prospective imports) and prospective changes in output. Estimated requirements (including military and civilian) were compared with supply information. Trends in livestock numbers, production and disappearance were analyzed.

Food fats and oils analyses for the coming year show an increase in the total supply. This is due to greater production of soybeans, lard, and cottonseed.

Projections of the production, supply and requirements for castor beans and oil were developed and forwarded to the OCDM and similar reports were prepared for palm, coconut and sperm oils.

2. Requirements and supply estimates for nonfood materials and facilities

Many nonfood requisites enter into the food picture as farm products travel from the farmer to the consumer. Manpower, fertilizer, pesticides, farm equipment, containers, processing machinery, fuel, and transportation are all vital to the Nation's food supply. The availability of these items is under constant surveillance by the Department. As in the case of food, current supply data are maintained for these key materials and are correlated with requirements, and projections are made to varying mobilization conditions in order to plan methods of dealing with problems which would occur during emergency periods.

Farm equipment.—Mobilization data basic to emergency operation have been kept up to date by adding current production and distribution information and a vulnerability study on aluminum.

Continued assistance and counsel in obtaining statistics has been given other agencies during the past year. The Department has worked with the Bureau of the Census on revising the schedules on collection of statistics on farm machinery and equipment. Representation has been provided on the committee arranging the schedule for the collection of nonfood data in the 1960 census of agriculture. An estimate was made of the production and distribution of aluminum portable irrigation systems. Work was done in cooperation with the Department of Commerce on the critical items list insofar as it relates to farm equipment.

During the past year numerous consultations were held with the representatives of the various agencies in government and members of industry. These included discussions on farm equipment as well as consumption of basic materials. Information and counsel were provided to marketing research firms, private consultant firms, and those financial groups who are interested in interpreting industry as it relates to the purchase of stocks and bonds. Consultation was also provided to a few task groups who were preparing technical papers on nonfood materials.

Normal farm usage of petroleum fuels for all types of production equipment has been determined, from which requirements would be developed in case of an emergency on the basis or remaining production facilities.

During the past year, the Department submitted to the Department of the Interior an estimate of the amount of electric energy being used annually by designated commercial food processors. Work has begun to determine the amount of electric energy required to process a unit of each major kind of food. When completed, this will serve as a basis for checking total requirements for food processing. Information has been compiled with a view toward determining the electric energy requirements for frozen food lockers.

Emergency requirements for farm transportation equipment have been revised and submitted. Tentative estimates have been made of requirements for milk tank trucks. Work is continuing on the development of requirements for building materials.

Food processing and containers.—Basic data on supplies and requirements were reviewed and supplemented, taking into account new processing and packaging methods. The Department recommended that container items (metal food cans, glass food containers, and closures for glass food containers) be added to the OCDM list of survival items. It was also recommended that the Department of Commerce conduct container surveys at an early date in order to provide all possible intelligence for assessing damage in event of an emergency.

Fertilizer and pesticides.—Published fertilizer statistics were analyzed anew and trends in production, foreign trade and supply in recent years were studied. These studies provided a rather reliable basis for estimating the year's fertilizer supply from data for the first 5 or 6 months in the 12-month period. The Fertilizer Situation for 1957–58, published in May 1958 as the 15th in a series of annual reports, contains supply estimates resulting from this analysis of trends. Additional data becoming available since publication of the report tend to confirm the accuracy of these estimates.

The Pesticide Situation for 1957–58 was published in April 1958, the sixth in this anual series. The fourth annual survey of manufacturers inventories of pesticides was conducted in the fall of 1957. For the second year a monthly survey of calcium arsenate production and stocks was made in the period April-August 1958, as a means of guarding against oversupply of this cotton insecticide.

Basic data relating to estimates of agricultural requirements for fertilizer and other chemicals are being continually added to so as to keep them up to date.

Rural electrification administration.—The fourth annual survey of electric borrower's construction plans and loan fund requirements was completed. The

survey measured the construction REA electric borrowers estimate will be required to serve their consumers during the period 1959–63. Borrowers' plans for the 5-year period indicated 19 percent higher contruction expenditures than for the 5-year period covered by the third annual survey. The fifth annual survey is nearing completion, and preliminary indications are that borrowers are firming their plans of a year ago for expanding distribution plant and power supply facilities.

During the year, REA began an inventory of the requirements for modernization and expansion of telephone plants in rural areas. This inventory will provide a complete picture of the present extent and condition of rural telephone systems as a basis for evaluating the construction and loan fund requirements.

Forest Service.—Work continued on the collection of information on forest resources and timber industries in the United States. Basic data useful for emergency timber production programs have been obtained.

Comprehensive reports were prepared on forest resources and forest industries in various foreign countries.

Attached to this report (exhibit 2) is a summary of the supply-demand situation for nonfood materials, facilities, and manpower used in the production and processing of agricultural commodities.

B. CURRENT ACTIVITIES RELATING TO THE EXPANSION OF PRODUCTIVE CAPACITY AND SUPPLY; RECOMMENDATIONS ON EXPANSION GOALS AND PROGRAMS NEEDED TO OVERCOME DEFICIENCIES IN THE MOBILIZATION BASE; AND ON REQUESTS FOR RAPID TAX AMORTIZATION AND LOANS AND PROCUREMENT CONTRACTS

Agricultural products are abundant at the present time and no special production-procurement programs are necessary. Expansion programs for food items in short supply previously carried out by the Department have provided valuable experience in developing methods of overcoming deficiencies of critically needed products and this experience can be utilized in emergency periods.

As a result of a castor bean production-procurement program, the Department maintains a castor bean seed stockpile for emergency purposes which insures a supply of seeds should it be necessary to encourage expansion of castor bean production. The seed stock is rotated periodically. As a part of this program the Department has established a stockpile of the highly specialized hulling and harvesting equipment for castor bean seeds.

Extra-long-staple cotton was stockpiled from the 1952 crop under authority of the Defense Production Act. As sufficient supplies of this cotton are now grown domestically, the inventory held by the Commodity Credit Corporation is being released. At the present time 450 bales remain unsold.

Further reference to stockpile programs is made in section G of part III of this report.

C. COOPERATION WITH OTHER AGENCIES IN CORRECTING DEFICIENCIES IN FOOD PROCESSING OR DISTRIBUTION CAPACITY OR THE CAPACITY OF SUPPORTING INDUSTRIES; CONSIDERATION OF MOBILIZATION REQUIREMENTS IN PLANNING AND CARRYING OUT REGULAR PROGRAMS OF THE UNITED STATES DEPARTMENT OF AGRICULTURE

1. Cooperation with other departments and agencies

In addtion to its collaboration with OCDM in planning and developing its defense program, the Department maintains close and continuous contact with other resource agencies of the Government. Under a mobilization situation, the Department would be a claimant agency for those nonfood materials essential to the production, processing, and distribution of agricultural commodities. When a review of requirements indicates a current or probable wartime shortage, these programs are worked out in cooperation with the appropriate agency.

For example, in order to properly correlate the Department's defense food responsibilities with those of the defense transportation agency, a joint committee was established with the Interstate Commerce Commission. Subcommittees have been organized for the following purposes:

To prepare and agree on procedures for the diversion or reconsignment of food shipments during an emergency;

To study and ease the impact of emergency transportation orders on the food agency's plans for emergency food shipments;

To study and correlate emergency requirements for cold storage for food and other warehouse space;

To develop a procedure for forecasting a major traffic pattern for wartime food shipments.

2. Consideration of mobilization requirements in regular programs of the Department

All agencies of the Department have been directed to take defense mobilization responsibilities in consideration in their regular and continuing program planning. As an illustration, agricultural research projects which seek new uses for farm products in abundant supply may also develop from these products substitutes for potentially scarce materials which have important defense uses.

D. DEVELOPMENT OF STANDBY CONTROLS TO INSURE RAPID AND ORDERLY CONVERSION TO FULL MOBILIZATION, OR FULL MOBILIZATION WITH ATOMIC ATTACK; COOPERATION WITH OTHER AGENCIES IN PLANNING OTHER DISTRIBUTION CONTROLS APPLICABLE TO FOOD REQUISITES

The Department has drafted a set of basic standby orders which can be put into effect in an actual emergency, subject to then existing authorities and conditions. Work is continuing which implements these basic food orders and with other agencies on controls for the nonfood requisites for which the Department would be claimant agency. (Additional comments on this subject are made in pt. XI of this report.)

E. COOPERATION WITH THE OFFICE OF CIVIL AND DEFENSE MOBILIZATION IN DEVELOPING STABILIZATION MEASURES FOR FOOD WHICH WOULD BE SUITABLE IN THE EVENT OF FULL MOBILIZATION OR FULL MOBILIZATION WITH ATOMIC ATTACK

Many current programs of the Department are designed to stabilize farm prices and protect the farmer's income. Programs sponsored by the Department in a wartime period would encourage production of food, conserve supplies, and insure equitable distribution. Although stabilization measures are primarily the responsibility of the OCDM, the Department stands ready to contribute to the development of operating plans in this area. A contribution to this planning area is the development and maintenance of basic statistical data covering agricultural commodities.

F. COOPERATION WITH THE DEPARTMENT OF LABOR AND OTHER AGENCIES TO INSURE THE AVAILABILITY OF MANPOWER NEEDED TO CARRY OUT FOOD PROGRAMS CURRENTLY AND IN FULL MOBILIZATION

Manpower agencies have been kept currently informed of estimated levels of agricultural production, crop progress, and similar information which is useful in the planning and conduct of programs needed for the recruitment and guidance of workers engaged in the production and processing of food and fibers.

The work of the technical subcommittee on revision of the standby list of essential activities has been practically completed. The recommendations of this committee when approved by the Interagency Committee on Essential Activities and Critical Occupations will become a part of the standby manpower mobilization plan.

The President's Committee on Migratory Labor met in May. Many basic problems relating to migrant farmworkers were discussed including housing, transportation, health education, and welfare facilities, a national system of registration of crew leaders, and the need for more detailed information with regard to the migrant farmwork force for use in program planning. The Committee agreed that efforts toward solution of these problems should be continued by all agencies and groups and especially stressed the responsibility of the respective States and communities in such solutions. With regard to housing, the Committee recommended: "That the Department of Agriculture be given primary responsibility with the cooperation of the Housing and Home Finance Agency and other Federal agencies for developing specific proposals for action that the Federal Government and States should take to assist in supplying and maintaining adequate housing and facilities for domestic agricultural workers and their families." The extent to which the Department will assume responsibility in response to these recommendations has not been determined. Major attention has been given to the wide distribution of information relating to ICC regulations governing the interstate movement of workers by privately owned trucks.

The Subcommittee on Equipment, Supplies, and Manpower of the House Committee on Agriculture held hearings on the extension of the authority for the Mexican farm labor program in June. This Department presented testimony favoring extension of this authority. The Congress has extended the authority for this program for a period of 2 years ending June 30, 1961.

Because of increased unemployment in the domestic work force, the Department of Labor is revising its procedures for determining wage rates in areas where foreign workers, especially Mexican workers, are employed. During recent months there has been considerable discussion between employer-representatives and representatives of the Department of Labor regarding this subject. An especially difficult problem exists in some areas where wages are paid on a piece-rate basis.

The Department continues to give attention to the development of standby instructions for guidance of agricultural stabilization and conservation State committees in their cooperation with manpower agencies during an emergency.

The Department has been asked to take leadership in the development of a method which can be adapted to local conditions for determining man-hour requirements for various farm activities.

The Department's comprehensive program of research and service work on all aspects of farm labor was continued during the year. Increased emphasis was placed on certain phases of the program. Work was continued along all lines related to defense mobilization. These include:

Annual estimates of hours of farm work and labor productivity;
Studies of employment and movement of migratory farm workers;
Studies in manpower resources in low income and labor surplus areas;
Surveys of labor used for farm overhead work;
Surveys of operations undergoing mechanization;
Estimates of future need for seasonal and migratory workers and labor requirements for specific crops by States and by method of handling.

The annual estimates of labor input in farming and its productivity were developed for 1957 and a continuation of the longtime downward trend in use of labor on farms is indicated.

The fifth annual issue of Changes in Farm Production and Efficiency (Statistical Bulletin No. 233), which contains information on the subject was released by the Department.

Field work was completed for a study of the effects of mechanization and fluctuations in business and weather conditions on seasonal labor needs and availability in New York State. Indications are that variations in the level of business activity influence the availability of day-haul and migrant seasonal farmworkers and that the mechanization of certain vegetable harvesting operations is altering the present utilization and scheduling of workers.

Analysis of the data collected from 629 open-country families in the Arkansas Ozarks indicates that this area is gradually shifting from agriculture to industrial and commercial activities. Only 18 percent of the families depended entirely on farming for income and 42 percent had no income from agriculture. The average open-country family received more cash income from wages, salaries, and profits from nonfarm employment than from any other source. Next in amount was income from nonwork sources such as retirement funds and old-age pensions. Third in importance was agriculture. Value of produce consumed at home was not measured but should be regarded as a fourth source of income. An article, A New Economic Era in the Ozarks, has been prepared for publication in the periodical Arkansas Farm Research, a publication of the experiment station. A more comprehensive manuscript is under preparation.

Field work was completed for a study of manpower changes in the delta area of Mississippi which are related to mechanization of cotton, acreage restrictions, and outmigration of the rural population. Labor force adjustments on delta farm operations have been substantial in recent years and the prospect of future change is likely. The number of croppers in the delta declined about one-third between 1953 and 1955. This was associated with a 40 percent reduction in cotton acreage under the allotment program. The proportion of cotton acreage in "cropper cotton" increased from 6 in 1953 to 8 in 1957. Seven of the plantations had all "cropper cotton" in 1953 compared to only three in 1957.

Benchmark estimates of man-hours per acre of fruits and tree nuts developed in 1956 were revised. Most fruits have not achieved as high a degree of mechanization as have field crops, for in recent years a quality control program has been stressed with a resultant increase in hand labor. The revised estimates of labor requirements provided the data for Labor Used for Fruits and Tree Nuts (Statistical Bulletin No. 232), by Earle E. Gavett.

A brief reconnaissance survey was made in some of the fruit and vegetable areas in the Northeastern States that use large numbers of seasonal and migratory farm workers. Tentative conclusions are that farmers will continue to

reduce needs for these workers chiefly by mechanizing the operations performed by them. Indications are, for example, that about two-thirds of the snapbeans for processing in New York will be mechanically harvested in 1958. However, some operations usually performed by these workers have proved difficult to mechanize, particularly on those products that are easily damaged. Consequently, labor reduction in many areas will be slow. Even if labor-saving methods are available, some farmers will continue to use hand methods and perhaps market a higher quality product.

Other publications approved or released:

Hecht, Reuben W. Agricultural Economics: Agricultural Labour. For Encyclopaedia Britannica.

LeRay, Nelson L. A Comparative Analysis of Manpower Potentials in Low Income Areas as Revealed by Rural Development Studies. (Speech, annual meeting of Southwestern Sociological Society, April 4–5, 1958, Dallas, Tex.)

Metzler, William H., and Charlton, J. Lawrence. Employment and Underemployment of Rural People in the Ozarks. (To be issued by Arkansas Agricultural Experiment Station.)

Metzler, William H. Socio-Economic Aspects of Manpower Adjustment: Low-Income Rural Areas. (For joint meeting, American Sociological Society and Rural Sociological Society, Seattle, Wash., August 27, 1958.)

G. ASSISTANCE TO THE OFFICE OF CIVIL AND DEFENSE MOBILIZATION IN FORMULATING PLANS FOR STOCKPILING CRITICAL AND STRATEGIC MATERIALS AND, TO THE EXTENT NECESSARY, IN THE ACQUISITION OF SUCH MATERIALS AND THE EXPANSION OF DOMESTIC SOURCES OF SUPPLY

Consideration has been given to recent policy changes affecting the strategic and critical stockpile. As a result emergency supply-requirements data developed by the Department have been adjusted from a 5- to 3-year period.

The Department participates with OCDM and other agencies in the formulation of stockpile programs and provides representation on the following OCDM-sponsored committees as well as other groups interested in stockpile objectives:

Interdepartmental Materials Advisory Committee
Interdepartmental Fibers Advisory Committee
Interdepartmental Forest Products Advisory Committee
Interdepartmental Chemical and Rubber Advisory Committee

Other stockpile activities include crop, forest products, and engineering research on strategic agricultural items and development of substitutes, and consideration of emergency food stockpiles in the United States Territories and possessions.

1. Stockpile research and experimental programs on strategic raw materials of agricultural origin or potential substitutes

(*a*) *Chemicals.*—A stock of viable belladonna seed, considered sufficient to produce 80 percent of the Nation's annual requirement, is being held. Germination tests of the lots of *A. belladonna* seed are being made to determine if the seed stock is adequate.

Lots of Digitalis purpurea seed are being maintained in a quantity estimated to be sufficient to supply the Nation's minimum requirements for production if necessary. Seeds ranging in age from 3 to 5 years showed a germination range of from 37 to 88 percent as tested in January 1958.

The stockpile of opium poppy seed, which was produced in 1951 for possible emergency planting, is periodically sampled and tested for viability. Germination tests recently made indicate a drop from the original reading, 74 to 78 percent, 53 to 60 percent. In tests made on February 21, 1958, the germination ranged between 52 to 57 percent, only slightly below the last 1957 test. A germination of 50 percent was obtained as tested August 6, 1958. If stockpiling is to be continued beyond 1960, plantings will probably need to be made in the fall of 1959 to obtain fresh seed. Some improved breeding lines of poppies have been selected and small lots of seed retained.

No crops research in underway at present on these crops.

(*b*) *Cordage fibers.*—Adaptation studies of phormium conducted along the Oregon and California coasts have established that the adapted range for Phormium tenax is between the San Francisco Bay area and Coos Bay, Oreg. Yield trials north of San Francisco have given high yields in a minimum of time under low rainfall, open-range conditions.

New yield trial plantings near Coquille, Oreg., show promise of giving needed information on fertility requirements and yield performance of selected clones.

Extensive studies at Corvallis, Oreg., on propagation methods show that small immature fans give the best results for vegetative propagation. The program at Berkeley, Calif., has been concentrated on selecting vigorous clones in the planting material derived from the seedlings developed from New Zealand introductions.

The severe winter experienced in Florida in early 1958 enabled the rapid growing Sansevieria trifasciata x S. desertii F_1 hybrids and segregating F_2 populations to be evaluated for winter hardiness and regrowth following different cutting heights. In general, the F_1 survived the unusually low temperatures exceptionally well and made rapid regrowth with the onset of spring. Cutting height studies showed that regrowth was more rapid following fall harvest where the plants were cut 2 to 3 inches above ground instead of at the ground line. These hybrids continued to demonstrate superior yielding ability over either of the parents and indicated possibility of annual harvest on the productive organic soils. Yields on the sandy soils near the east coast were good. Soil fertility and disease problem studies are being continued.

Several hundred pounds of fiber from the cultivated S. trifasciata plots and also from the better hybrids have been secured. This will be held until an amount sufficient for a large scale manufacturing test has been accumulated.

A new type of sansevieria harvester using the scuffle hoe-type cutter principle was constructed and tested. The cutting principle seemed satisfactory but the pickup conveyance system was inadequate to move the cut leaves away from the blades. Further modifications and construction of the machine will be made before more tests are conducted.

Studies of kenaf retting methodology have continued. The water retting time requirement has been reduced through application of information obtained in these studies. Mist retting experiments have also been continud but as yet have not given as high quality fiber as desired. The two collectotrichum disease-resistant varieties have been inceased to build up the seed supply in the event of future need.

Tests of the field harvester-ribboner were encouraging. Modifications which had been made on the crushing rolls seemed entirely satisfactory but a longer feed table is needed so that the entire stem is on the table before the rolls grab it. Airplane-type tires mounted on the machine help support it on muck soils. Further modifications are indicated for separating the plants and coordinating this activity with the cutter bar. It is quite possible that the present harvester originally designed for ramie should be completely reconstructed on a larger scale to efficiently handle the larger kenaf plants.

(*c*) *Tanning materials.*—Canaigre field experiments to develop more economical practices for growing canaigre and improving the quality of the roots for processing were continued. A 2-year test to compare yields and tannin content of four cropping methods was completed. There was no difference in total yield between harvesting at the end of 2 years, or growing two annual crops. Crown planting was definitely superior to seed planting. The tannin content and extract purity were both higher from the 2-year crop than the average of the two 1-year crops. The better selections of Salt River canaigre averaged 37 to 38 percent tannin with purities of 64 to 66 percent. Liberal irrigation all season produced highest yields of roots per acre. The use of either nitrogen or phosphate fertilizers did not increase root yield significantly. Agronomic investigations were initiated in the Wellton-Mohawk area of Arizona in 1958 to develop cultural practices where costs of production will be less than in central Arizona. Observations have indicated that canaigre can be grown successfully in this area, although yields may not be as high as in central Arizona. The Arizona Agricultural Experiment Station cooperates in production research and the Department's Eastern Utilization Research and Development Laboratory makes all analyses for tannin content and purity and conducts extraction and tanning studies.

(*d*) *Oils.*—Castor bean breeding is being continued in California, Arizona, Texas, Florida, Oklahoma, and Mississippi. The major objective is to develop new, improved varieties for each area. Progress has been made in improving the yield of castor beans through the developmnet of F_1 hybrids. In tests at Davis, Calif., over a 3-year period, 4 experimental hybrids averaged 3,680 to 3,840 pounds per acre compared with 3,300 pounds for the best commercial hybrids. Three experimental dwarf-internode varieties developed in cooperation with the Texas Agricultural Experiment Station are undergoing extensive yield testing. Seed of these varieties is being increased for possible release. Progress has been made in breeding lines resistant to both Alternaria and bacterial leaf spot. Two dwarf-internode varieties with a high degree of resistance to bacterial leaf spot ranked among the top yielding entries at Plainview, Tex.

Genetic factors responsible for the sex characters, pistillateness and interspersed male flowers, utilized in the commercial production of hybrid seed, have been transferred to dwarf-internode type. Hybrid seed produced on female parent lines with pistillate tendencies were used for planting yield trials in 1958. Basic genetic studies on spike size, oil content, spininess, stem color, disease resistance, and seed quality are in progress.

As a result of cooperation with manufacturers, 25 castor bean harvesters have been built and used during the last season in harvesting approximately 15,000 acres of castor beans in California, Arizona, and Texas. Approximately 26 harvesters are known to be under construction at present, making approximately 51 harvesters available for the 1958 harvesting season. All of these machines used stripping and hulling principles developed by the Department.

A two-row, tractor-mounted experimental castor-bean harvester (without huller) was built by the Department for testing new components and for determining the practicability of a lower cost harvester. This harvester strips the unhulled beans from the plants and delivers them to a bin which is mounted on the tractor. A companion fieldside huller machiner was built and will handle the beans for two harvesters. Thus, smaller size tractors can be used on the harvesters and the machines can be much simpler than the onceover harvester-huller. Both machiner were very effective. However, a bin at least 50 percent larger would be needed on the machine to harvest one round on rows one-half mile long of high yielding beans.

Engineering assistance was given to a large agricultural implement company in designing and testing a cylinder-type huller and other component parts for an experimental attachment to one of their combines. Results in harvesting dwarf-type castor beans in Texas indicate further development work will be necessary.

Harvesting tests were made in the Mississippi Delta and Delaware areas to determine whether varieties of castor beans growing in thos areas, as well as plant, soil and weather conditions, were suitable for use of castor-bean harvesters. Low yields and extremely wet weather hindered test operations.

(*e*) *Extra long staple cotton.*—The American-Egyptian variety, Pima S–1 has now almost completely replaced the earlier variety, Pima 32. The high yield of Pima S–1 has made it as acceptable to the growers and its good spinning performance has created a good demand by the spinners. Studies are being conducted on improved machine harvesting and cleaning methods of the seed cotton and lint. The increased use of machine harvesting is reflected in reduced production costs.

(*f*) *Rubber.*—Research on guayule has been maintained on a standby basis during the year. Over 25,000 individual plant samples from the 1954 and 1955 nurseries were analyzed for rubber content. The 1958 breeding nursery contains progenies of promising open-pollinated single plant selections found in the 1954 nursery, as well as 200 controlled crosses or backcrosses between outstanding selections. Germination tests of stockpiled seed of the commercial variety 593 indicate no deterioration after 14 years storage at room temperature. Large increase blocks of eight high rubber-yielding varieties are being planted to replace seed of variety 593 (low rubber-yielding) now in storage.

(*g*) *Forest products.*—Research projects have continued in cooperation with defense agencies in developing economical designs of crates, packages, and other containers. A standardization study on crate construction has been completed for the Army engineers. Work has continued on the development of processes using wood waste as a raw material for manufacture of furfural, levulinic acid, glycerine, alcohols, hydroxymethylfurfural and other industrial chemicals.

2. Emergency food stockpiling

Studies have been continued in regard to the desirability of food stockpiles. A food stockpiling policy statement has been prepared on this important question which emphasizes the importance of stockpiles of food in homes and in shelters used as temporary housing following a nuclear attack. Another paper was prepared in regard to the food stockpiling implications of Operation Alert 1957. This paper states that conditions assumed for Operation Alert 1957 would not require a national stockpile of food. It indicates, however, that further study is needed in regard to the desirability of food stockpiles in food-deficit areas, in shelters and in the Territories and possessions of the United States. Some further study also is indicated for imported foods.

A preliminary study is underway in the Department to determine what kinds of foods would be the most acceptable for use in the event a stockpiling program should be undertaken. This study to date shows the initial costs per pound and per thousand calories for nonperishable foods purchased by the De-

partment and the Army Quartermaster during the last fiscal year. There is a wide variation in the initial procurement cost per thousand calories for the various kinds of nonperishable foods. If the foods having the lowest caloric costs are selected, a reasonably acceptable ration of 3,000 calories could be assembled at an initial cost of about 50 cents per person per day. A week's supply of such a ration would have a gross weight of about 17 pounds and would occupy two-thirds of a cubic foot of ordinary dry storage space.

In cooperation with other agencies of the Government further study is underway on the problem of food stockpiling in the United States Territories and possessions. Reports have been received from several of these areas in response to the request for information and recommendations in regard to the desirability of establishing stockpiles of food in those places. These reports are being analyzed, along with other information, as the basis for a departmental recommendation to the Congress.

Studies are underway also in regard to the desirability of food stockpiles in industrial plants and office buildings where feeding facilities are available. This work will develop information on kinds and amounts of foods, space requirements and costs to meet minimum needs per thousand people for a 2-week period, as well as rotational and disposal problems.

3. Barter

The barter program of the Department exchanges surplus agricultural commodities for foreign-produced strategic and other materials required for stockpiling and for materials, goods, and equipment needed in foreign economic, military, and assistance programs and offshore construction programs. Barter transactions are made mainly under authority of the Agricultural Trade Development and Assistance Act of 1954, as amended, and the Commodity Credit Corporation Charter Act.

Fifty barter contracts totaling $61.2 million were negotiated for strategic and critical materials from July 1, 1957, to June 30, 1958. (Contracts totaled $273 million for the preceding fiscal year.) The principal commodities which barter contractors exported to friendly countries during the fiscal year were wheat, corn, grain sorghums, barley, oats, cotton, and wool.

Materials delivered to the Commodity Credit Corporation during the fiscal year were valued at $194 million, including $178 million in strategic and critical materials. The total value of deliveries from July 1, 1954, through June 30, 1958, was $706 million, of which $658 million represented strategic and critical materials.

Strategic and critical materials have been transferred in substantial quantities from CCC inventory to the national stockpile and, as authorized by the Agricultural Act of 1956, to the supplemental stockpile. Cumulative transfers of materials valued at $578 million were made from July 1, 1954, through June 30, 1958, and distributed as follows: $156 million to the national stockpile; $413 million to the supplemental stockpile, and $9 million to other Federal agencies. From July 1, 1957, to June 30, 1958, transfers totaled $224 million including materials in the amount of $196 million to the supplemental stockpile, $25 million to the national stockpile, and $3 million to other Federal agencies. A balance of strategic materials, valued at approximately $222 million, is being held in CCC's inventories for subsequent transfer.

4. Use of foreign currencies for stockpile acquisition and other purposes under Public Law 480

(*a*) *Purchase of strategic and critical materials.*—Title I of Public Law 480 (sec. 104 (b)) authorizes the use of foreign currencies for the purchase of strategic and critical materials. As of June 30, 1958, the amount so earmarked had been reduced to $2 million equivalent.

(*b*) *Military family housing.*—The equivalent of $132.7 million is planned for purchase or construction of military family housing under title I, Public Law 480 agreements.

(*c*) *Common defense.*—An equivalent of $300.2 million may be used in procurement of military items for common defense. This results from agreements signed under title I of Public Law 480.

H. GUIDANCE AND LEADERSHIP IN THE DEVELOPMENT OF PLANS AND PROGRAMS TO INSURE CONTINUITY AND OPERATION OF VITAL FOOD FACILITIES IN THE EVENT OF ATTACK

1. Facilities vulnerability studies

The Department is continuing its analysis of the vulnerability of food facilities together with certain other facilities of importance to food supplies in the United States in the event of a nuclear attack. These analyses were initiated in 1954.

2. Other special food industry studies

General studies.—In order to more effectively carry out the defense assignment to the Department, several studies of various food processing industries are currently in process and under consideration. Since bakers yeast could be one of our more critical products in an emergency, an analysis of this industry has been in progress for several months. Data are being tabulated for more than 200 plants in the macaroni and spaghetti industry.

Surveys are currently under consideration for the baking industry, the feed manufacturing industry, and the rice milling industry. The advice and suggestions of trade associations and representatives of these industries will be obtained before the Bureau of the Budget is asked to approve these proposed surveys.

Additional defense planning studies will be considered as soon as the required manpower and resources can be diverted for this purpose, and the necessary clearances obtained.

County review of food processing and storage facilities.—Tentative lists of facilities were sent to the county officials for verification and additional listings. The resulting data include 10,126 facilities in 33 selected industries. This does not include all food industries or all facilities within these industries. Additional listings will be added as they become available.

Analysis of grain storage facilities.—Owing to the importance of grain products as a source of emergency food, a national study has been made of the storage capacity in commercially operated elevators and warehouses (exhibit 3). This study shows 18,193 grain storage facilities in 2,210 of the 3,067 counties in the United States. The present estimated capacity of 3.5 billion bushels represents a 20 percent increase over the capacity estimated in 1954. When the total storage capacity owned and operated by the Government is included, the total off-farm storage in the country may be summarized as follows:

	Thousand bushels
Commercial storage capacity	3,500,000
CCC-owned bins	988,000
Wheat stored in ships (mothball fleet)	45,000
Total capacity	4,533,000

3. Vulnerability of CCC-owned stocks

It is the established policy of the Commodity Credit Corporation to take defense consideration into account in the location of CCC-owned stocks so as to reduce the vulnerability of Government-owned grain stocks and improve their distribution for emergency use. Each commodity office submits an annual estimate to the Department covering their results in implementing this policy. The relative location of these stocks with respect to target areas was plotted on a series of maps. On December 31, 1957, 82 percent of the CCC-owned wheat stocks were located outside critical target areas, along with 95 percent of the corn, 77 percent of the other grains, 58 percent of the dairy products, 86 percent of the cotton, and 97 percent of the tobacco. Because of the importance of edible foods in the CCC stocks, a quarterly review is made of their vulnerability status and copies of this review are maintained for emergency use. Some progress has been made in reducing the vulnerability of these CCC-owned stocks and, insofar as efficient operating practices will permit, the established dispersal policy will continue to be utilized.

4. Facilities vulnerability mapping project

The Department maintains a facilities vulnerability mapping project which covers the major critical target cities in the United States. These maps identify location and point out concentrations of food facilities of nationwide importance, facilities manufacturing items essential to food production, processing and distribution, and food facilities for local consumption.

5. Defense publications

Defense Guides for Commercial Food Facilities (Agriculture Information Bulletin No. 169) was published last year and distributed to the food industry. Because of widespread interest in this bulletin, copies continue to be distributed through trade groups and field offices.

Defense Against Radioactive Fallout on the Farm (Farmer's Bulletin No. 2107) was published last year and sent to farm groups. It was revised in May 1958 for further dissemination by the Department and other Government agencies.

I. DEVELOPMENT AND MAINTENANCE OF PLANS TO INSURE THE CONTINUITY OF THE ESSENTIAL FUNCTIONS OF THE DEPARTMENT IN EVENT OF ATTACK ON THE UNITED STATES

Additions to the Defense Operations Manual were prepared and communications instructions revised during the year. This manual, designed for use in emergency operations, covers policies and procedures relating to performance of essential activities by Department personnel.

Communications between the national and field level were expanded using the General Services Administration rapid written communications network. Space arrangements for communications at the national relocation site of the Department were improved.

The staffing pattern of the regional liaison headquarters of the Department was implemented for purposes of defense planning, participation in test exercises, and emergency operations.

Capabilities of regular field offices of the Department to function in an emergency period has been increased by selecting and equipping additional field relocation sites, and training personnel.

IV. Miscellaneous Defense Activities

A. DEFENSE PLANNING COMMITTEES

An interdepartmental committee designated as the Interagency Food Requirements Planning Committee has been appointed with the chairmanship in the Department of Agriculture. The committee has overall responsibility for review and recommendations in a possible emergency.

Additional defense planning committees have been established in the Department during the current fiscal year in the field of agricultural research in the Agricultural Research Service. They will help to correlate research programs with emergency planning, and, in an emergency, they would be responsible for guidance in application of research results to emergency measures. In addition to these research groups, a committee was activated to develop plans and data in connection with defense information responsibilities of the Department in an emergency. Other defense planning committees (reported previously) have continued to function in the food and rural fire and foreign agricultural areas.

B. RURAL FIRE DEFENSE

1. National and State plans

The national rural fire defense plan has been completed in final review draft form. It will be distributed to Federal and State rural fire defense organizations for review and comment, and will be coordinated with the national plan for civil defense and defense mobilization.

During the year, six additional State rural fire defense plans have been received. Six more plans have been completed and should be received soon. This will bring the total to 41 (including Hawaii).

2. Radiological defense

Radiation monitoring in rural fire defense is receiving increased attention. In Operation Alert, 1958, it was concluded that effective control of rural fires following nuclear attack requires advance training and equipping of large num-

bers of personnel in the rural fire defense organizations for the protection of fire-fighting forces and their food and water supplies. A number of Federal, State, and private individuals in the rural fire defense program have received instructor training in radiological monitoring, and over 1,100 have attended various instrument operation and informational training meetings. Additional instructor training is being scheduled as time and funds permit, the objective being to have a nucleus of instructors and monitors, nationwide, in the RFD organizations. A current problem in that connection is a shortage of radiological instruments for training purposes. The northern, northwestern, and southwestern regions of the Forest Service have qualified radiological monitoring instructors and are interested in conducting monitor training sessions in their areas.

3. National Academy of Sciences

The Department, through its Forest Service, continued active participation in the Committee on Fire Research and Fire Research Conference group at the National Academy of Sciences. A fire research conference was held in May 1958. At this conference a proposed national program of basic research that would enable a better understanding of free-burning fires and that would greatly facilitate new advances in techniques and methods in all fields of fire control was put into final form. This proposed program of needed research will serve as reference to all departments of Government and all research agencies. In drawing up the program the many unknown physical and chemical relationships that now exist were defined. This analysis has served also to define many areas of research eligible for support through the National Science Foundation.

Dr. James R. Killian, Special Assistant to the President for Science and Technology, has consulted with the Chairman of the Fire Research Committee of the National Research Council-National Academy of Sciences on the need for such work and on its relationships to civil defense, national defense, and future technical progress. It is understood that he plans to call an interdepartmental meeting to explore the interests and responsibilities of the various Government departments in fire research. The Department will be requested to participate.

The prospects of continuance of the Committee on Fire Research and Fire Research Conference were considerably strengthened through an agreement between the Forest Service and OCDM for sharing financial support of its maintenance by the Academy of Sciences. It is understood that support by the Department of Defense is also pending.

Dr. Killian favors international exchange in this field and believes the committee and conference group can serve effectively as a coordinating agency for the United States.

4. Project Civil

The fire research staff of the Forest Service's California Forest and Range Experiment Station has continued participation in Project Civil being carried out at the University of California under contract with OCDM. Forest Service participation involves determination of the effect of large fires on fallout patterns.

C. SAGE PROGRAM

Work has continued with the telephone industry and the United States Air Force on SAGE projects. Thirty-eight SAGE installations are completed, under construction, or planned in REA telephone borrowers' territory.

D. OPERATION ALERT, 1958

The first (or attack) phase of Operation Alert, 1958, was carried out primarily at State and local levels beginning May 6, 1958. County agricultural stabilization and conservation committees were asked to contact local civil-defense officials and offer assistance in handling food problems during May 6 and 7. The Forest Service conducted tests of 25 State rural fire defense organizations. Field representatives of the Agricultural Research Service provided assistance in radiological defense and in evaluating damage by radiation and fallout to soils, crops, livestock, and food stocks.

Based on detailed operating instructions, agricultural stabilization and conservation State committees of the Commodity Stabilization Service cooperated with State statisticians and other employees of the Agriculture Marketing Service in appraising attack damage to major agricultural crops and the production of meat, milk, poultry and eggs, and in determining remaining supplies. In 20

selected States estimates were prepared covering the food requirement and supply situation at 30 and 90 days following the hypothetical attack. These data were transmitted to the Department's national headquarters for further use in the exercise. Narrative reports were also required from State-level paticipants and their suggestions for improved operations were included.

Prior to phase I, preparatory training sessions in damage assessment were held at the national level by defense planning committees and support agencies of the Department. A damage-assessment program was conducted at the national level during the first phase of the exercise by the Damage Assessment Defense Planning Committee in cooperation with the other planning committees and support groups. This program resulted in wider and more effective analysis of damage to agricultural and forest resources, based on attack information received from OCDM, printouts covering resources from the National Damage Assessment Center and basic data available in the Department, including an analysis of effects of fires in rural areas. It should be noted that the damage analysis related to individual resource areas and did not reflect the interdependence of various resource areas. A national damage-assessment report on food and agricultural resources was prepared for OCDM and for use by phase II participants. A copy of this report is attached as exhibit 4.

Phase II of Operation Alert, 1958, was conducted during the week of July 14 at both regional and national levels.

The regional liaison representatives of the United States Department of Agriculture met with their staffs on July 14, 15, and 16 at their relocation sites to evaluate data arising out of phase I of the exercise and the national damage-assessment program. Their conclusions regarding the effects of the simulated attack on food supplies and requirements in their regions, together with an evaluation of necessary actions were made available to the Office of Opal resources and operations in each region and also to the national relocation site of the Department.

The national relocation site of the Department was activated on July 14, although the main program took place on July 16, 17, and 18. On those 3 days a group of key planning personnel, who were selected from the various defense planning committees of the Department, met to consider the adequacy of defense planning in relation to the simulated attack. They had available as background all of the material developed previously in Operation Alert, 1958, including the reports from the regional liaison representatives.

These headquarters personnel conducted their studies through the following seminars:

1. Supply-requirements review.
2. Review of standby plans and orders relating to distribution and procurement of food.
3. Review of plans for food production on farms and in processing plants.
4. Nonfood requisites and relation with other resource agencies.
5. Rural fire control.
6. Special fallout problems.

Each seminar developed conclusions and recommendations in their respective subject-matter areas which were carefully reviewed by the executive staff. These conclusions were incorporated in a final report. A copy of this report as submitted to the Office of Civil and Defense Mobilization on August 11, 1958, is attached (exhibit 5).

In general it appeared that food could be provided to meet emergency needs following an attack pattern such as that visualized in the exercise. An acute shortage would appear, however, in certain items on a national basis and in several areas of the country. The exercise demonstrated that most of the rural fire defense organizational units are not fully capable of carrying out their functions in a nuclear attack.

About 13,000 employees of USDA participated in phase I and 353 employees at national and regional levels participated in phase II of Operation Alert, 1958.

Some of the major conclusions and recommendations resulting from phase I and phase II of Operation Alert, 1958, will be considered further in phase III which will culminate on September 17, 18, and 19.

V. Effectiveness of Program

The development of modern weapons has changed the entire defense planning picture, and experience gained in the food programs in previous emergencies can point out only some of the problems which we would encounter in a mobilization

period today. As progress is made in our defense plans, we find that participation in test exercises provides a mechanism for measuring the effectiveness of program planning and the adequacy of relocation plans.

VI. Current Need for Program

In order to fulfill its obligations in the defense planning area the Department must be ready to convert its peacetime food programing to an operation to fit a national emergency at any time. Therefore, planning must be current, realistic, and adequate in scope. It must be flexible in order to reflect new requirements resulting from changing attack techniques. We feel that much has been accomplished in maintaining a strong and effective planning program, but it is a type of planning which does not reach a stage of completion because it must keep pace with developments in the world situation.

VII. Programs as Related to Small Business

The Department is cognizant of the need for programs that assure fair and equitable treatment of the small-business man and the small family farmer. Secretary's Memorandum 1426 of August 14, 1958, directs each agency of the Department to consult and cooperate with the Small Business Administration in the formulation of policies affecting small-business concerns.

Continuing programs such as market news and marketing research assist small firms in the food industry. Marketing agreements and orders stimulate consumption; the agricultural conservation program enables farmers and ranchers to conserve and protect farmland and to control water resources; crop insurance alleviates the impact of weather hazards on the farm; services provided to producer-cooperatives assist in their organization and operation—these are only a few examples of programs of the Department which encourage and protect the small family farmer as well as the small business enterprises in the local farming community.

VIII. Major Problems in Carrying Out Defense Planning and Programs

Many of the major problems in defense planning were highlighted by the recent experience of Operation Alert, 1958.

It must be assumed that in the event of nuclear attack, local areas will be unable to contact central headquarters for a time. One of the most pressing problems is the need for delineation of Federal, State, and local responsibilities for the distribution of food during this period. Local government officials responsible for local handling of food need a clearer understanding of their responsibilities and authorities for carrying out their functions in relation to the national food agency. Therefore, a food organization with field components down to the local level must be established with standby authorities to carry out prearranged plans.

It is also important in future defense planning to evaluate the interrelationships of food and the nonfood resources such as transportation, power, manpower, fuel, and so forth. Availability of these nonfood resources has a significant effect on ability to produce and distribute food supplies.

Since no funds are made available specifically for mobilization planning, personnel, and facilities of the Department's existing organization are utilized. This is a desirable arrangement except where defense assignments become so demanding that they cannot be carried out satisfactorily without detriment to other responsibilities.

IX. Changes in Mobilization Planning to Meet Attack and Other Emergencies

In order to maintain proper perspective, an effort has been made the past year to achieve a better balance in planning for situations involving attack on the United States and for those which might involve mobilization without attack.

X. Availability of Food and Fiber in Event of Attack

Conclusions from Operation Alert, 1958, provide the most reliable information in regard to the adequacy of food supplies during a possible postattack period.

Estimates of consumable food supplies and requirements for the first 30 days and the first 90 days following the assumed attack indicate that total supplies would be adequate but a substantial dislocation would occur in the food shortage areas within the 90-day period unless emergency transportation could be provided. Our primary concern during this period would be in providing the people with a minimum number of calories for survival.

The exercise indicated that yeast for baking bread would be in critically short supply. While an adequate supply of food grains would be available in well-dispersed locations, transportation would be a problem and milling and processing facilities also might be limiting factors. The possible effects of shortages of transportation and other nonfood requisites were not fully analyzed in the exercise. Supplies of meats and fish would be adequate, although distribution would be badly distorted. The supplies of poultry, meat, and eggs would be below normal on a per-capita basis. Milk and milk products during the first 60 days after an attack would be only about 20 percent of preattack supplies. Fruit and vegetable supplies would be adequate on a national basis but transportation and containers would be limiting factors. Sugar supplies would be critical until adequate transportation and ocean shipping space could be provided.

Lack of refining facilities would limit the supplies of vegetable fats and oils for consumption. Cotton supplies would be adequate, but facilities for processing linters might be inadequate. Wool supplies and processing facilities would be reduced substantially by a nuclear attack such as was assumed for Operation Alert, 1958.

In connection with transportation requirements, a study has been made to provide basic information that would be useful as a guide to transportation management during a national emergency. This study presents an analysis of the effects of various factors on the efficiency and use of transportation facilities, based mostly on data for rail shipments. Proportionate use of rail facilities also is shown for nonfoods, as well as for many kinds of foods. These data indicate that much could be done to conserve transportation facilities used for food movements during an emergency. This would require consideration of certain characteristics of food commodities, such as distance of shipments, tons shipped per carload, and energy value supplied per pound of the commodity.

XI. Summary of Standby Programs for Any Future Emergency

The Department has a large number of operating programs which could be converted to use in an emergency with very little difficulty. Similarly, the personnel now used in the administration of these programs could be used in the administration of emergency programs. Thus, the Department automatically has a basic standby capability. However, to facilitate this conversion from normal to emergency operations, it is also necessary to have some standby emergency plans.

The Department is participating actively with the Office of Civil and Defense Mobilization in the development of standby plans which can be used in any type of emergency. This has included, for example, a review of the national plan for civil defense and defense mobilization which, when finally issued, will be a policy guide for all nonmilitary defense planning. The Department is preparing a food annex to this national plan. The Department is also cooperating with the Office of Civil and Defense Mobilization in rechecking and reviewing as necessary the plan C which relates to Federal action steps which would be appropriate in emergencies short of attack on the United States.

The Department has developed over the past several years a series of standby orders which would be needed to carry out its food responsibilities and responsibilities relating to supporting nonfood materials and manpower in various types of emergency. Most of these orders relate to the control of food supplies and the orderly distribution of such supplies. They cover such subjects as inventory freeze, antihoarding, requisitioning, control of use and distribution, priorities, set-asides for procurement, and distribution and rationing of farm equipment and commercial fertilizer.

These orders were reviewed and refined by defense planning committees of the Department during the winter months and several suborders to cover particular commodities or functions were also drafted.

The orders were reviewed in Operation Alert, 1958, and some conclusions were reached for refining them and implementing them at headquarters and field levels.

Ideas were also obtained during Operation Alert, 1958, for standby plans relating to farm production. Some of these will be further developed during the coming year.

Rural fire plans have been worked out in cooperation with the States and these plans and rural fire organizational arrangements were examined during Operation Alert, 1958. The exercise was helpful in pointing out methods for strengthening these standby arrangements.

Basic to standby readiness to meet any further emergency is an adequate emergency organization at headquarters and field level, together with a clear understanding of relationships with other agencies of the Government. This need was especially emphasized by experience in Operation Alert, 1958. Standby plans which have been developed to date are summarized in the Department's Defense Operations Manual.

XII. Changes in Organization During the Past Year

During the past year, certain changes have been under consideration for the overall organization necessary to carry on the complete functions of the Department in time of an emergency. Special attention has been given to a further review of emergency headquarters organization. It is hoped that these plans can be completed and approved within the near future.

A change has recently occurred in the Department's current organization for defense planning. Liaison responsibilities between the Department and the Federal Civil Defense Administration and the Office of Defense Mobilization have been carried out by the Office of the Under Secretary of Agriculture and the Commodity Stabilization Service, respectively. In view of Reorganization Plan No. 1 of 1958 consolidating FCDA and ODM, the Department has centralized its liaison responsibilities. The Food and Materials Requirements Division of the Commodity Stabilization Service has been given responsibility for liaison with the newly created agency and for necessary interchange of information and coordination of defense planning and mobilization activities in the Department. Overall policy and operational determinations in the defense mobilization area remain the responsibility of the Under Secretary. (See exhibit 6.)

XIII. Availability of Funds for Defense Needs

Peacetime programs of the Department can, with some adaptation, be converted to emergency use. Defense planning, therefore, is carried out through the existing organization utilizing personnel and techniques engaged in current programs. Expenses incurred in defense activity are absorbed by funds appropriated for regular and continuing programs. A problem in connection with this situation is discussed in part VIII of this report.

XIV. Defense Plans and Future Objectives

The Department continues to be the agency responsible for the emergency food program as well as programs relating to defense against biological and chemical warfare as they affect crops or animals, special fallout problems relating to food and agriculture and control of rural fire. The Department or appropriate successor agency would also be responsible for administration of such programs if an emergency should occur.

This is appropriate since the Department now carries on many similar program responsibilities which would require a minimum of change in either objectives or staffing to adapt them to emergency conditions. Defense plans must permit the Department to use its substantial existing capability to best advantage in any emergency.

The defense plans of the Department must also continue to be consistent with the total nonmilitary defense program coordinated and directed by the Office of Civil and Defense Mobilization. Department representatives work closely with OCDM with this in mind and, as noted, the Department is contributing a food plan annex to the national plan for civil defense and defense mobilization. The Department has contributed substantially to other Federal plans for various types of mobilization with and without attack.

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XV. Recommendations of Joint Committee on Defense Production—Seventh Annual Report

None of the recommendations contained in the Seventh Annual Report of the Joint Committee on Defense Production were specifically related to defense planning activities of the Department of Agriculture.

Exhibit 1

Report to the House Committee on Agriculture on the Current Food Situation and Possible Effects of the Tense International Situation, August 1958

Insofar as food and other agricultural products are concerned, the supplies available in this period of tense international developments are adequate to meet foreseeable requirements, that might result from the current international situation. The alltime record crop of 1958 as forecast by the August 11 crop report strongly support this conclusion.

Although the Department of Agriculture has no basis on which to forecast the course of the international situation, it is recognized that, should the present situation lead to an outbreak of localized hostilities or general warfare, the demand for agricultural products and the pressures on prices would be greater than now. The nature of the hostilities and the extent of the mobilization would be reflected in the demand for food and farm prices.

Agricultural production for 1958 is expected to be at a record high level. The all crop indexes for production of 113 exceeds substantially the previous highs of 106 attained for only 3 previous years.

Also, there are on hand large supplies of most types of storable farm commodities and there are no major farm products currently in short supply. It would appear, therefore, that barring an actual outbreak of hostilities, there will be no major price pressures due to increased demand. For the purposes of this analysis, it is assumed that the international situation will not change materially from the present situation.

REQUIREMENTS

Any increase in military activity and industrial production in this country would have some tendency to increase the demand for food. However, domestic consumption of food is now at near record levels and no great increase seems probable. The foreign situation, however, is much more difficult to assess. Increased world tension normally results in increased export demands for some food products, particularly fats, oils, grains, sugar, and cotton.

As was the case in the period immediately following the Suez crisis in the fall of 1956, and following the outbreak of hostilities in Korea, some increased exports of agricultural products may result if the present world tension increases. The extent of such an increase might be tempered by the fact that importing countries now have relatively large stocks of some agricultural products and large supplies of grains are available from other exporting countries.

An outbreak of military hostilities on a local or large scale in any other part of the world would likely intensify the demand of foreign countries for our agricultural production. By contrast, an all-out nuclear war would probably make it impossible to maintain more than token exports for a considerable period following an initial attack. Damage to ports and transportation facilities might make it impossible to export even those food products remaining in adequate supply. Under such postattack conditions, domestic demand would probably be reduced proportionally more than supplies as a result of destruction of our population and industry. Food processing and distribution would be seriously disrupted.

PRICE IMPLICATIONS

Increased demand for any type of product with the same supply normally results in an increase in price. An increased foreign demand for agricultural production would undoubtedly exert upward pressure on the prices of farm products. A nuclear war would introduce many complicating factors and no attempt is made herein to assess the price effects of such an attack.

Large stocks of some important agricultural products, particularly grains now held by the Government and by producers under Government price support, would tend to limit the possible price increases for such products. In the case

of meats, foreign purchases are normally small relative to domestic production and consumption. The expected increased supply of pork in 1959 would normally be expected to have price depressing influences but increased demand, either domestic or foreign, might be an off-setting factor. A relatively large supply of vegetable oils and lard, and the prospects for a very high level of production from the 1958 crops, would tend to offset any price increasing effects of increased foreign or domestic demand.

STOCKS AND UTILIZATION

Farm, commercial, and Government stocks of farm products as a whole, on January 1, were larger in 1958, both in total and in relation to annual disappearance, than in either 1941 or in 1950. During recent years, stocks of many farm commodities have increased. On January 1, 1958, the value of the stocks of all food items was about 38 percent of the expected total disappearance, of food commodities during the year (table 1). This may be compared with only 30 percent of the requirements carried into 1941, and 31 percent on January 1, 1950.

During the period for which data are available (1924–58), the stocks of food products on January 1 varied from a low point of 21 percent of the total year's disappearance in 1937 to the high of 38 percent this year.

Stocks of nonfood farm products are higher, relative to rates of disappearance, than stocks of food products. On January 1, 1957, stocks of nonfood farm products amounted to about 114 percent of total disappearance in 1957, compared with 92 percent in 1950 and 108 percent in 1941.

Disappearance of farm products into distribution channels in the United States tends to increase more in periods of tension than in other years. Relatively large increases in total disappearance of food products occurred in the years 1941, 1942, 1943, and 1951. Increases in disappearance of nonfood farm products were less pronounced than for food products during these emergency periods.

It should be recognized that stocks of individual farm crops vary considerably. However, it appears safe to generalize in saying that stocks, together with currently expected production of all important farm crops and livestock products, are at levels sufficiently high to meet any foreseeable increased demand resulting from the current international situation.

COMMODITY SITUATIONS

The following paragraphs compare the current supply requirements situation with that existing at the beginning of World War II and the Korean war. Supporting statistical data are attached in table 2.

Wheat.—A wheat crop of 1.3 billion bushels is forecast for 1958. This, together with 881 million bushels carried over from previous crops, is equal to more than 2 years of domestic use plus 2 years of high level exports of wheat. Also the estimated 881 million bushels of stocks on July 1, 1958, is more than twice the amount carried over in 1941 or 1950.

This country had comparatively large stocks of wheat on hand at the beginning of World War II and at the beginning of the Korean emergency. During World War II, wheat exports were relatively low, due to restrictions on shipping, but considerable quantities of wheat were used for alcohol and feed. Wheat exports were large after the war ended. The demand for wheat subsequent to the outbreak of hostilities in Korea increased gradually, but did not reach its peak until more than a year following the outbreak of war.

Wheat exports in the past 3 years have exceeded the high wheat exports following World War II and during the Korean emergency. The large stocks of wheat and the expected 1958 crop will make it possible to supply all foreseeable requirements from stocks for more than 2 years.

Rice.—With the carryover of rice on August 1, 1958, estimated at 18.6 million hundredweight and a crop of 47 million hundredweight forecast for 1958, the supply of rice without another crop will be adequate to meet all domestic requirements for 2 years, including exports to Cuba and Canada. The August 1, 1958, stocks are more than six times as large as the carryover stocks in 1950. Exports of United States rice during the past 3 years have been maintained at a relatively high level. Commercial exports during this period averaged about 8.7 million hundredweight as compared with 6.6 million hundredweight in 1941 and 13.2 million hundredweight in 1950.

Fats and oils.—Foreign demand for fats and oils from the United States usually increases with the development of international tension. Exports were high during World War II and during the Korean war. The degree to which exports might increase as a result of the current situation is difficult to forecast. During the past year the exports were somewhat less than for the previous 2 years. Carryover stocks of total food fats and oils were about 1.2 billion pounds in 1941, about 0.9 billion pounds in 1950 and they were estimated at about 1.1 billion pounds at the beginning of 1958.

The large prospective soybean crop, plus an expected carryover of about 20 to 25 million bushels of soybeans, will provide a major source of oils and oilseeds for export. The supply of cottonseed oil will be near the 1957 level. Lard supplies will increase in the latter part of 1958 and early 1959, as the expected increased hog marketings occur. It appears probable that all foreseeable demands for fats and oils can be met without causing any drastic increase in price. Price pressure on fats and oils, however, is likely to be greater than on most other agricultural commodities normally exported.

Milk and milk products.—Dairy production is now at near record levels and is expected to continue at about the present rate. Commercial stocks of all types of dairy products in 1941, 1950, and 1958 represented only a week to 10 days' production of milk. Commercial exports of dairy products are normally relatively small. Pressure on milk supplies and prices, therefore, appears more likely to come from increased domestic use of fluid milk than from foreign demand. No shortage of dairy products or major increase in prices appears probable unless there is a stepup in mobilization activity.

Poultry and eggs.—Poultry-meat production in 1958 is expected to set a new record high. As in the past, poultry stocks represent only a few days' production. Although we have developed a small commercial export market for poultry products, it is unlikely that foreign demand will be a significant factor in the near future insofar as poultry meat is concerned. Egg production in 1958 is expected to be slightly below the levels of the last 3 years, but egg production would expand readily with any material increase in price. Egg stocks at the beginning of 1941, 1950, and 1958 represented only a few days' production. Therefore, nearly all requirements must be supplied from current production.

Any significant changes in demand or prices for poultry or eggs will depend on domestic demand. Commercial exports of eggs normally represent only about 1 percent of United States production and are not expected to increase sufficiently to materially affect the supply or price situation. Foreign purchases of poultry products were not significantly increased by the outbreak of hostilities in 1941 or 1950.

Beef and pork.—Numbers of livestock in feed lots on farms are at high levels. Pork production at the current time is near the low point in the current pork cycle, with prospects of materially increased supplies beginning in 1959. Stocks of meat represented about 4 percent of production in 1941, compared to about 3 percent in 1950 and less than 2 percent at the beginning of 1958. The 1958 beef marketings have been reduced somewhat from levels of the preceding several years, due largely to holding back of breeding animals to restock western ranges.

Commercial exports of meat normally require about 1 percent of the United States production. Imports and exports are approximately equal. Increased foreign demand for meat is unlikely to materially affect either price or the supply available to United States civilians. Any price effects of the present world situation are likely to result from increased domestic demand resulting from increased business activity in this country. Increased supplies of pork expected in 1959 will tend to hold down the inflationary effect of any increased demand.

Fruits and vegetables.—The current international situation is unlikely to have any material effects on the supply or requirements for total fruits and vegetables. However, increased world tension could result in increased purchases of canned items by the military. Current large stocks and prospects for a large 1958 crop would appear to make it possible to meet any increased requirements.

Carryover stocks of canned fruits and vegetables, including juices, in packers' hands at the beginning of the 1958–59 marketing season were somewhat smaller than the record stocks of a year earlier. With a large pack expected this year total supplies will be near the record high levels of the past 2 seasons. Exports amount to a relatively small percentage of total supplies and its appears unlikely that foreign demand will increase significantly in the near future. A substantial increase in military requirements could be met through reducing carryover from the present near record high stocks while maintaining civilian consumption at the level of recent years.

Supplies of fresh fruits and vegetables are expected to be generally adequate to meet anticipated needs. During past emergencies the supply of these fresh perishable products has presented few significant problems, in part due to the flexibility in production of many of these crops and to their limited adaptability to emergency operations.

Neither the World War II nor the Korean war resulted in any material increase in commercial exports of fruits and vegetables. The primary effects in both of these emergencies resulted from increased military procurement.

Sugar.—The prospective supplies, worldwide, as of mid-1958 are more ample than in the fall of 1956. It appears that quota management should be sufficient to alleviate any short-run problem despite the low 1958 production in Hawaii and in Puerto Rico. Prospects for 1958–59 crop production in the important areas as of July 31, 1958, are highly favorable with respect to supplies for both the United States and the rest of the world.

World War II affected the sugar supply and price situation beginning in late 1939. Timely relaxation of quotas, however, made a large supply available, so that, except for a flurry in September-October, domestic prices remained stable. A similar but accentuated pattern applied to supplies and marketings in 1941 and in the fall of that year the relaxation of quotas was augmented by price ceilings. Beginning in 1942, of course, Philippine supplies were lost, other war requirements affected domestic production and rationing of sugar became necessary despite the purchase of the Cuban crops and other wartime measures.

The onset of action in Korea in 1950 again set in motion increased demand for sugar for inventory purposes which were satisfied at relatively stable prices by management of quotas under the Sugar Act, supplemented by export controls. The tensions associated with the Suez and Hungarian situations in the fall of 1956 contributed to a demand and price situation much like that which prevailed during the Korean affair. Again, quota management was used to provide adequate domestic supplies, so that stable prices were maintained.

Feed grains.—A record carryover for the four major feed grains estimated at 61 million tons and the prospect for near record crops of feed grains in 1958 assure an adequate supply to meet the needs of United States livestock producers and all export requirements. Feed grain stocks at the time the 1941 crops were harvested were about 23.1 million tons. The comparable figure for 1950 was 30.5 million tons.

Feed grain exports were not materially increased by either World War II or the Korean war and it appears improbable that the present emergency will result in any greatly increased demand for feed grain exports.

Much of the feed grains would be available for food use in the event of extreme emergency.

In any event the large supplies on hand help insure continuing production at high levels of livestock and livestock products.

Cotton.—The first official estimate of cotton production for 1958 indicates a crop of about 11.6 million bales. This crop together with a carryover of about 8.5 million bales and small imports would make a supply of about 20 million bales available in the 1958–59 marketing year.

The total supply of all cotton in the United States was 22.9 million bales in the 1941–42 marketing year, 16.9 million in 1950–51, 22.3 million in 1957–58, compared with around 20 million in 1958–59. The disappearance (consumption and exports) was 12.3 million bales in 1941–42, 14.6 million in 1950–51, 13.6 million (estimated) for 1957–58, and is expected to be around 12 to 13 million in 1958–59. The current supply, therefore, is much larger, in relationship to the disappearance, than in 1950 but is not quite as large as in 1941.

The carryover of cotton in the United States was 12.2 million bales on August 1, 1941, 6.8 million bales on August 1, 1950, 11.3 million bales on August 1, 1957, and is expected to be around 8.5 million bales on August 1, 1958.

The production potential for cotton in the United States, as well as in the entire world, is now much greater than in 1941 or 1950 primarily because of technological improvements.

Tobacco.—Tobacco production of all types in 1958 is currently estimated to be about 10 to 15 percent below 1958–59 estimated disappearance. Consequently, it is expected that total stocks of tobacco will decline about 200 million pounds during 1958–59. Carryover stocks for all types of tobacco of 4.4 billion pounds are well above levels of 1941 and 1950, when carryover stocks were slightly over 3 billion pounds. In terms of domestic and export requirements, the carryover

stocks for 1958 represent about 2.2 years' disappearance. The 1941 carryover was equal to about 2.1 years' requirements and the 1950 carryover about 1.6 years' requirements. Thus, the total supply in 1958–59 (carryover plus production) will be equal to about a 3-year disappearance. A supply of this size will probably be large enough to meet all demands without causing any price increase.

Domestic demand for tobacco was materially increased during World War II and the Korean war. Exports also increased due to the Korean war.

Wool.—Currently the United States is much more dependent on imports for its supply of apparel wool than in 1941. In 1940, United States wool production of 210 million pounds (shorn and pulled, clean basis) represented about two-thirds of United States mill consumption. By 1950, United States production had declined to about 120 million pounds and was equivalent to only about one-fourth of domestic mill use. Production then increased gradually to 129 million pounds in 1957. During 1955–57, the domestic production was equivalent to a little less than 50 percent of domestic mill use though there was an even decline in mill use of wool. Since 1950, the supply of an increasing variety of improved man-made fibers has increased greatly and the increased use of these fibers has contributed considerably to the sharp decline in domestic mill use of wool.

Carryover stocks into 1958 marketing season of about 115 million pounds compared with about 102 million pounds in 1941 and 1943 million pounds in 1950. World stocks and production of wool currently are larger than in 1941 and 1950.

As was the case during World War II and the Korean war, increased world tension could result in an increased demand for wool. Any international situation, which would seriously interfere with shipments of wool from Autralia and other surplus-producing countries, would likely result in shortages of wool to meet our domestic requirements.

TABLE 1.—*Total value of stocks of farm commodities, percent changes in annual disappearance, stocks as a percent of disappearance and contribution of stocks to the years' disappearance, 1940–58* [1]

[Data are for calendar years]

Year	Value of Jan. 1 stocks		Increase or decrease in use versus previous year		Stocks on Jan. 1 [2] as percent of year's use		Percent of year's disappearance derived from stocks [3]	
	Food	Nonfood	Food	Nonfood	Food	Nonfood	Food	Nonfood
	Million dollars	*Million dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1940	7,964	5,924	2.5	1.0	29	109	−2.5	−4.9
1941	8,652	6,191	5.3	5.9	30	108	−3.0	.3
1942	9,517	6,173	8.5	3.0	30	104	−1.4	−4.2
1943	9,960	6,420	9.7	3.2	29	105	3.9	5.9
1944	8,618	6,062	1.2	−5.1	25	105	.1	−2.6
1945	8,577	6,214	−2.0	4.0	25	103	1.4	4.1
1946	8,114	5,969	−1.4	8.5	24	91	−.8	10.5
1947	8,376	5,281	−0.1	−9.3	25	89	2.4	.5
1948	7,558	5,252	−4.8	−0.4	24	89	−7.2	−5.6
1949	9,861	5,580	2.7	−0.4	30	95	−1.7	−7.7
1950	10,402	6,030	1.2	11.3	31	92	−1.6	9.2
1951	10,929	5,430	3.4	0.2	32	83	3.1	−1.6
1952	9,876	5,531	−0.7	−3.6	29	88	−1.8	−6.1
1953	10,515	5,915	0.7	−3.3	30	97	−2.8	−9.9
1954	11,473	6,321	0.4	−1.9	33	109	−2.7	−6.2
1955	12,433	6,896	4.2	1.1	34	114	−2.2	−10.2
1956	13,225	7,514	5.2	4.8	35	118	−1.0	.1
1957	13,623	7,506	−0.8	3.3	36	114	−1.4	8.6
1958	14,148	6,943	−1.9	(4)	[5] 38	(4)	[5] 2.9	(4)

[1] Relationships were developed from quantitative data on supply and use of unprocessed and processed farm commodities multiplied by average prices in 1947–49. All values are adjusted to farm values.

[2] Stocks include farm and commercial stocks, and holdings under price support and domestic supply programs.

[3] A minus sign means an addition to stocks. Absence of a minus sign indicates a net withdrawal from stocks during the year.

[4] Not available.

[5] Preliminary estimates.

Source: Agricultural Handbook No. 91.

TABLE 2.—*Estimated total disappearance and beginning stocks of farm products in the United States in 1941, 1950, and 1958*

[Data are for calendar years, except where indicated otherwise]

Product group	Total disappearance			Beginning stocks			Stocks as percent of disappearance		
	1941	1950	1958 [1]	1941	1950	1958 [1]	1941	1950	1958 [1]
FOODS									
Meat group (million pounds):									
Beef, veal, lamb, and pork	19,928	22,414	26,582	768	625	346	3.9	2.8	1.3
Poultry, eggs, and seafood	9,834	13,898	16,100	385	852	752	3.9	6.1	4.7
Dry beans, peas,[2] and peanuts [2]	3,043	3,409	3,215	1,451	2,134	1,459	47.7	62.6	45.4
Milk group (million pounds):									
Fluid milk, cream, and ice cream (milk equivalent)	48,648	59,794	69,632	(3)	(3)	(3)	(3)	(3)	(3)
Dry milk and cheese	1,306	2,251	3,457	161	502	717	12.3	22.3	20.7
Evaporated and condensed milk	3,329	3,289	2,595	196	253	223	5.9	7.7	8.6
Food fats and oils (million pounds):									
Butter and margarine	2,567	2,612	3,102	41	146	113	1.6	5.6	3.6
Other food fats and oils [4]	4,764	6,487	8,043	1,179	917	1,075	24.7	14.1	13.4
Fruits and vegetables (million pounds):									
Dried fruit [2]	967	739	720	231	73	106	23.9	9.9	14.7
Other fruits	[5] 21,157	23,569	26,063	[5] 3,530	3,726	5,576	[5] 16.7	15.8	21.4
Potatoes, all [2]	21,677	25,175	24,034	(3)	(3)	(3)	(3)	(3)	(3)
Other vegetables	[5] 26,599	30,824	34,990	[5] 5,041	5,318	7,070	[5] 18.9	17.3	20.2
Food grains:									
Wheat and rye (million bushels) [2]	742	1,085	1,006	404	435	891	54.4	40.0	88.6
Rice (rough) (thousand hundredweight) [2]	26,123	38,860	44,327	2,956	3,469	18,660	11.3	8.9	42.0
Sugar, raw value (thousand tons)	8,139	8,339	9,000	2,356	1,759	1,880	28.9	21.1	20.9
NONFOODS									
Feed grains (thousand tons) [2]	109,696	124,622	133,440	23,077	30,548	61,072	21.0	24.5	45.8
Cotton (thousand bales) [2]	12,295	14,617	12,600	12,166	6,846	8,700	98.9	46.8	69.0
Wool apparel (scoured basis) [6]	514	437	225	102	143	115	19.8	32.7	51.1
Tobacco (million pounds) [2]	1,550	2,071	2,080	3,200	3,305	4,419	206.4	159.6	212.4

[1] Preliminary estimates.
[2] Crop year data.
[3] Negligible.
[4] Excludes amounts used in margarine.
[5] Data are for 1943, since data are unavailable for earlier calendar years.
[6] Wool stocks data for 1950 are for April; 1941 and 1958 stocks data are for January; disappearance data are for calendar years.

EXHIBIT 2

THE SUPPLY SITUATION—NONFOOD MATERIALS, FACILITIES AND MANPOWER

FARM EQUIPMENT

No substantial change in the level of production and distribution of farm machinery and equipment occurred during the early part of 1958. As is generally the pattern, there has been some shifting of emphasis from one manufacturer's equipment to another. On the whole, however, there has been a reasonable increase in the volume of farm machinery and equipment produced and shipped. The tractor situation is improving with the industry showing reasonable gains over last year. The previous year's shipments were barely sufficient to replace the tractors which were wearing out and becoming obsolete. The shipment of equipment other than tractors has been holding up very well and it is expected that 1958 will represent the third consecutive year in which farm machinery sales will show a reasonable increase.

Petroleum fuels have been in adequate supply during the past year. Tank truck prices of gasoline to farmers were reduced slightly from June of last year to June of this year.

Factory sales of motortrucks during the first 6 months of this year were below those of last year for the same period. Motortrucks sales this year were about 80 percent of those for the same period last year. The prices of one-half-ton pickups to farmers advanced about 4 percent from July of last year to July of this year.

About 1,800,000 tractor and implement tires were produced during the first 6 months of this year, of which 1,172,000 were small (21-inch rim diameter and less). Inventories at the end of June were about 650,000 of which almost 430,000 were small. Almost 6 million truck tires were produced, of which 2.8 million were 8-ply and under. At the end of June almost 3½ million were in inventory, of which almost 1½ million were 8-ply and under.

The dollar volume of construction activity was slightly higher during the first 7 months of this year than the same period last year. The slight increase was due largely to increased spending for highway and public housing. Farm construction during the period was about 2 percent higher than for the first 7 months of 1957. All building materials have been in adequate supply during the past year. Prices of many building materials have been reduced since June 1957. This is especially true of lumber products.

FERTILIZER

A brisk movement of fertilizer materials in the fall of 1957 tapered off into the usual winter lull. Inventories were built up in anticipation of the heavy spring season in 1958. Unusual weather conditions caused the heavy spring movement of fertilizers to be slower to develop than in the previous year.

It is estimated that supplies of plant nutrients available for domestic fertilizer purposes in 1957–58 were about 2 percent less than in 1956–57.

Synthetic ammonia capacity totaled about 3,900,000 tons of N on January 1, 1958. An additional 200,000 tons of N capacity is expected to come on stream during 1958. On January 1, 1958, urea capacity was 623,100 tons of material with facilities reported under construction or planned for completion during 1958 or early 1959 which would bring the total to 795,800 tons; plans were announced in July 1958 for an additional 109,500 tons.

Capacity for production of P_2O_5 on January 1, 1958, was estimated to be 4,751,000 tons. The P_2O_5 capacities were distributed as follows: 3,331,000 tons in normal superphosphate, 1,020,000 tons in concentrated superphosphate, and 400,000 tons in ammonium phosphates, calcium metaphosphate, and nitric phosphates.

Domestic potash capacity was estimated to be 2,500,000 tons of K_2O on January 1, 1958. Six major United States potash producers are active in the development of deposits in the province of Saskatchewan, Canada.

PESTICIDES

Ample capacity exists in the United States to meet domestic requirements of insecticides, weed killers, and other types of pesticides, as well as to export large quantities to many points abroad. Some downward adjustments in 1957 production schedules for pesticidal chemicals were made by the industry so as to avoid excessive buildup of inventories. United States production of synthetic organic pesticides, however, has more than doubled in value from 1953 to 1957. The overall unit value of sales rose only 17 percent in that period. Indications are that domestic consumption of agricultural pesticides was heavier in 1958 than a year ago.

The heavy demand for domestically produced DDT to be shipped abroad in fiscal 1959 in connection with malaria eradication programs has tightened the supply in the United States. Until an up-to-date capacity figure for production by the eight domestic manufacturers became available in July 1958 through a survey by the Department of Commerce, some concern was felt that a shortage of DDT might develop. It appears now that producers should be able to meet without difficulty domestic and normal export demands as well as the stated requirements of foreign health assistance programs.

Dollar value of pesticide exports for the first 5 months of 1958 was up 6.17 percent over the same period a year ago. At that rate the value of exports in 1958 would reach $91 million compared with $86 million in 1957.

FOOD PROCESSING AND CONTAINERS

The container supply situation is good. There are no shortages of containers in any of the commercial fields. Packaging technology continues to move forward. A notable example is the expected expanded use of aluminum in the preservation of foods.

Food machinery manufacturers continue to supply the requirements of processors without difficulty. Food processing and distribution establishments continue to expand in numbers consistent with the demand for more "convenience" foods and the suburban growth.

MANPOWER

Crop production in 1957 surpassed the previous record high and overall yield levels reached an all-time peak. The overall yield per acre of field and fruit crops surpassed the previous record in 1956. Bad weather interfered in many areas with the harvesting of fall crops. The 1958 crop season started with a long, cold, wet spring planting season which delayed planting of some crops and required replanting of others. Continuing heavy rainfall in many areas resulted in yield prospects for most crops that seem likely to make 1958 by far the Nation's biggest crop year. Thus upsurge of productivity pushes the all-crop index for production and yield per acre to new high levels. No serious shortages of labor developed during the 1957 fall harvest period. However, some sizable labor adjustments were required due to unusual weather.

The number of persons employed on our Nation's farms during 1957 continued its sharp downward trend. For the 10th consecutive year the average employment for the year has shown a decline from the preceding year. The annual average of 7,649,000 workers for 1957 is nearly 3 percent below 1956 and 26 percent under the average farm employment 10 years ago. Mechanization and changes in farm technology have played a large role in this downward trend in farm workers. Total crop and livestock production has been maintained and even increased during the past several years with this smaller number of workers. Some areas continue to rely on foreign workers to meet the needs that cannot be met from domestic labor supplies. The United States Department of Labor reports that during the calendar year 1957 the following numbers of foreign workers were contracted for employment on United States farms:

Mexican nationals	436,049
British West Indians	8,171
Canadians	7,100
Japanese	1,000
Basque	165

Severe weather in Florida during the winer and cold wet weather in some areas during the 1958 planting season resulted in low earnings and hardships for hired farm workers, especially migrants. Many workers who depend on employment in winter vegetables and citrus were stranded and forced to accept help from relief agencies. This situation and increased unemployment in the domestic work force has caused the Department of Labor to step up its efforts to place domestic workers in farm jobs. State employment services and farm employers have been urged to exert greater effort to recruit workers from domestic sources. Some reduction in the employment of foreign workers is evidenced by the contracting of 185,000 Mexican nationals from January 1 through August 9, 1958, as compared to 210,000 such workers contracted during the same period last year. Increased efforts are being made by the Farm Placement Service of the United States Department of Labor to guide farm workers to areas where employment is available and to provide fuller employment through the expansion of its annual worker plan. Excessive rainfall in some areas continues to make it difficult to carry on farm work on schedule and crop losses are occurring with resultant losses of income to both workers and farmers.

EXHIBIT 3

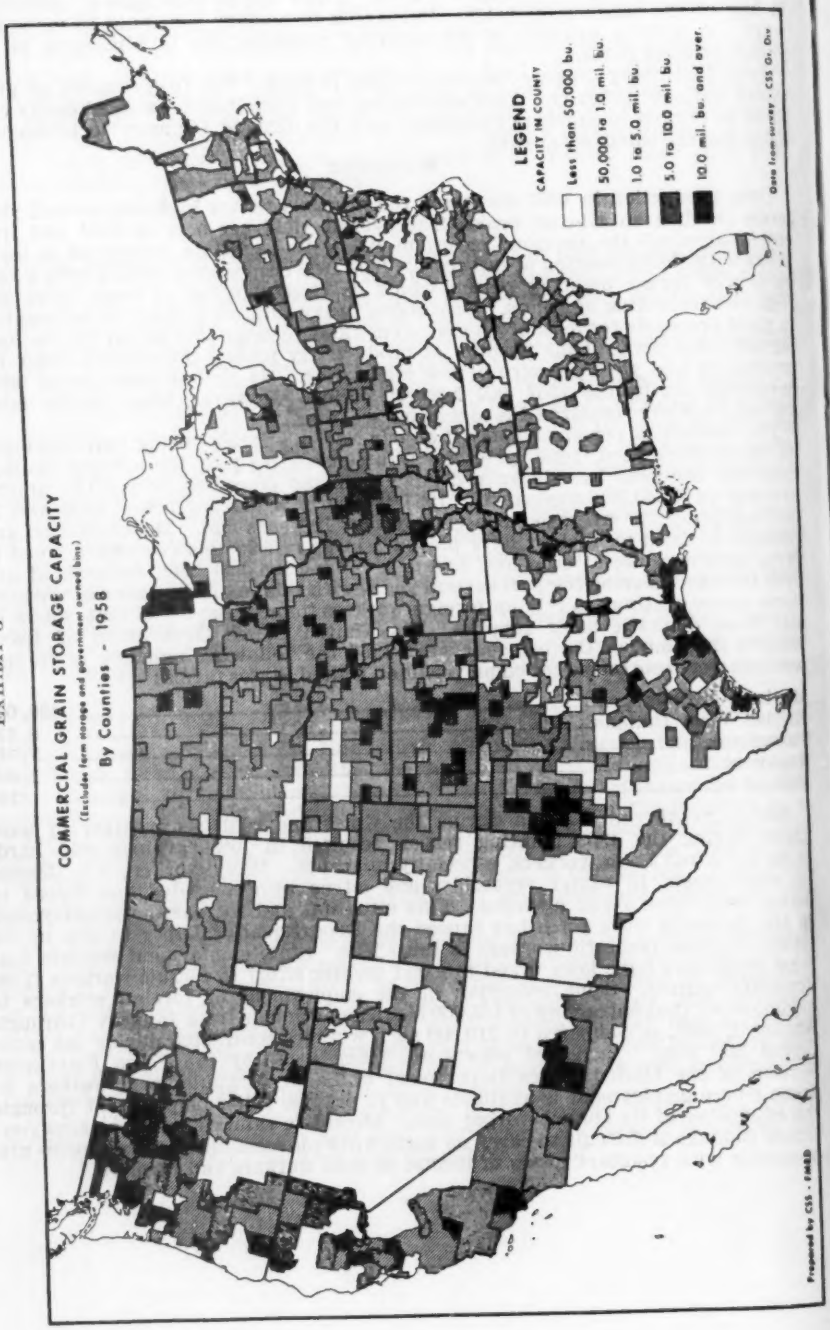
COMMERCIAL GRAIN STORAGE CAPACITY
(Excludes farm storage and government owned bins)
By Counties - 1958
LEGEND
CAPACITY IN COUNTY
Less than 50,000 bu.
50,000 to 1.0 mil. bu.
1.0 to 5.0 mil. bu.
5.0 to 10.0 mil. bu.
10.0 mil. bu. and over
Data from survey - CSS Or. Div.
Prepared by CSS - FMRD

EXHIBIT 4

NATIONAL DAMAGE ASSESSMENT REPORT ON FOOD AND AGRICULTURAL RESOURCES

OPERATION ALERT 1958

United States Department of Agriculture Damage Assessment Defense Planning Committee, Associated Defense Planning Committees, and Defense Support Agencies

I. BASIS FOR THE ASSESSMENT AND SUMMARY EVALUATION

A. Assumptions used in assessment

This is a first approximation of probable damage to food and agricultural resources in the continental United States resulting from the thermonuclear attack assumed in Operation Alert 1958. It considers damage from blast, fire (both that directly associated with blast, and the subsequent wildfire), and some of the effects of radiation from fallout. Except for effects of radioactive iodine on dairy cattle, only external gamma radiation has been considered as a source of damage to livestock or as a cause of denial of access by people which results in damage to property or normal production. Flood damage resulting from broken dams and subsequent loss due to lack of irrigation water or power are not considered in the assessment due to unavailability of basic information which is within the purview of other defense agencies. Similarly, any loss in production or supply which might result from shortages of nonfood materials, facilities, supplies, or manpower because of the effects of the attack on population or on other industries has been ignored. In other words, this is a horizontal analysis of food and agricultural resources only; all phases of the vertical analysis necessary for preparation of the needed second, or even third approximation of net damage to the food supply have been reserved for attention during the July phase of OPAL 58. No attempt has been made, therefore, to carry this damage analysis to the point of producing a supply-requirements balance sheet for either food or the requirements for food production.

This assessment assumes that food supplies in homes and in surviving retail outlets will provide subsistence for survivors for 14 days following the attack. The analysis, therefore, is directed toward the food supplies on which survivors would be dependent after D+14, namely, food in wholesale outlets and in processors' hands, farm stocks, and farm production. The national assessment of damage to these several food and agricultural resources is summarized in part I B below and in more detail in parts II to V.

This work has been based primarily upon hand analysis techniques adapted by the Department of Agriculture to the food and agricultural resource field. NDAC summary print-outs have been used most extensively in analysis of livestock and land (but not including analysis of crops or pasture and grazing land). The official strike and radiation fallout map and the burnout map were used throughout, and the principal cause for deviation from NDAC conclusions is the effects of wildfire, in that it has been assumed that all resources in the burned over areas are completely lost. The analysis of off-farm food facilities especially reflects this situation.

The analysis on which this report rests was done by the defense planning committees and defense support agencies in collaboration with the Damage Assessment Defense Planning Committee of the United States Department of Agriculture. The principal limitation of this assessment is that it stops at a first approximation, thereby failing to show the true picture of remaining resources for food. For instance, no consideration has been given to whether gasoline and oil will be available to produce the crops for which land is available. No deduction has been made for the perishable foods that would be lost due to lack of transportation, electric power to process or preserve, or to lack of a repair part which must be had on a given day—not 1 or 2 days or a week later. No estimate has been made of the food that would not reach the consumer because of a shortage of containers of a particular type, etc. A true picture can be produced only by further study of the relationships and dependencies of the food industry and the food-support industries and services and a net damage assessment made therefrom. The analysis also is overly optimistic in its findings because of the lack of necessary measuring sticks to account for the full effects

of radiation, especially of alpha and beta radiation effects on livestock and to a lesser extent, crop production. Also, denial time schedules seem to be too lenient in view of the blanketing nature of the fallout patterns, especially for crop production in areas 1, 2, 3, and 4.[1]

In contrast to the above, the chief strength that should be recognized is the ability of the food industry to overcome the limitations that have been stated. This strength stems from a number of factors. Many segments of the food industry, for example the flour milling industry, operate at only a fraction of capacity. Where this is true, much additional food processing can be accomplished without new equipment by operating at capacity on a 7-day, 24-hour basis. Many food processing plants are operating on a seasonal basis and frequently, if transportation facilities were available, these plants could operate for longer periods of the year and could be adapted relatively easily to the processing of foods not previously processed. For instance, cottonseed crushers could crush soybeans, castor beans, etc. In other cases, food processing could stop short of the relatively high level which is now often characteristic of some segments of the food industry with consumers adjusting their diets to an equally nutritions, but more basic food. This might be especially true in the cereal and baking industry. Processing on the farm and in the home could be stepped up materially to offset damage to presently operating food plants. This would be common practice after an attack, particularly for poultry and meats. Increased freezing of foods as a preservative might well replace a loss of tin or glass containers if they were the limiting factors in some industries. Also, as indicated in the section on food stocks (pt. IVA below) there is great substitutability among foods, making no single food absolutely essential. After an attack the extremely tight situation in food processing would be relieved by substituting other foods which had suffered less in the attack, and the diet of survivors would suffer little if any. Other illustrations of the versatility and adjustability of the food industry could be cited, but they would add little to the above indications that, despite the bottleneck in food processing which would seem to appear after an attack, the food industry and consumers would adjust quickly to make full use of the relatively plentiful supplies of food that would be available on farms and in primary storage facilities.

B. Summary evaluation

1. *USDA personnel and offices.*—Offices and personnel of the Department of Agriculture suffered severely in the attack, with largest losses at the national headquarters. The main group of buildings suffered moderate blast damage, and high radiation intensity covered all USDA facilities in the metropolitan area. The national relocation site was not affected by blast, by fallout will hamper its use for a long period. Field offices in larger cities also suffered significant losses, and least loss was suffered at the county office level.

2. *Food stocks.*—The overall postattack food supply, under the assumptions stated above is, relatively good. Even after reservation of seed and breeding stock, there would be at least a 10-month food stock which would provide 2,200 calories per day for each person surviving the attack. If the emergency is sufficiently severe, this time period can be extended to a year or longer if corn, oats, and other grains normally used for feeding livestock are used as human food. Also, food stocks could be further extended by reducing breeding herds.

However, it must be recognized that, of the total reserve of foods, those ready to eat without much if any processing will feed the surviving population for only 1½ months. Of the directly consumable items, grain products are in best supply, meats are in favorable supply, processed milk, sugars, fruits, and vegetables are in quite limited supply, and supplies of food fats are extremely short. The distribution of these consumable supplies is relatively poor, with supplies in areas 1, 2, 3, and 4 being less than average, and very poor in areas 1 and 2. Supplies in areas 6, 7, and 8 are very favorable, with those in area 8 being 3½ times average for the Nation.

3. *Land and crops.*—Considering only the factors affecting production outlined in A above, 1958 crop production after the attack is expected to be in a favorable situation, at least for most crops. This is based largely on early access to most land that has been covered by fallout. Ninety-three percent of cropland will be available for use by D+14, and 99 percent is expected to be accessible by D+90.

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[1] As used in this report, the word "area" refers to USDA areas, which are the same as the ODM–FCDA regions that are being used in OPAL 58.

On this basis, no crop loss exceeds 30 percent, which is about the same as population losses. The only crops with prospects under 90 percent of preattack expectations are rice, processing vegetables (30-day supply), and tobacco. Later phases of the exercise likely will reduce these estimates somewhat on the basis of the interrelationships between industries.

4. *Livestock.*—Livestock survived the attack in a more favorable manner than did human population. Survival rates (alive at D+30) vary from 77 percent for broilers to 86 percent for cattle. For laying hens and dairy cows, for which radiation sickness also must be considered, the proportion of the population which is both alive and well after attack is 70 and 71 percent, respectively, which is comparable to the human population survival rates. This results in an expected egg production at 70 percent of preattack estimates, again on the basis of previously stated assumptions. Because of the limits on use of milk from grazing cows, milk for fresh use would not exceed 10 percent of preattack for some weeks following attack. Processed dairy products would be more plentiful because much milk not suitable for fresh use could be processed. Also, milk for fresh use would be increased if cattle are stabled.

5. *Food processing, storage, and distribution facilities.*—The most severely damaged segment of the food and agricultural resources picture is food processing, storage, and distribution facilities. These are more universally located in cities than are other food resources, and in consequence, suffered more blast and fire loss. They also have higher denial time for resumption of activity within this category of resources. The facilities which are in largest units usually are in larger cities, ports, and target areas. Therefore, this type, typified by vegetable oil refineries, sugar refineries, coffee roasters, federally inspected meatpackers, chainstore and other wholesale facilities, etc., are hardest hit. Availabilities at D+14 as a percent of preattack, range from zero to 25 or 30, and by D+90 the availability seldom exceeds 50 percent. In contrast, for industries like condensed, evaporated, and dry milk processing plants, which usually are small in size and located in rural or semirural areas, damage is light, with half or more of the plants being available by D+14, and 60–80 percent being available by D+90. Other segments in relatively good shape are poultry and egg packing, and CCC grain storage bins are in exceptionally good condition, with 84 percent availability at D+14 and 94 percent at D+90.

6. *Other agricultural commodities and resources.*—The cotton industry is in a good postattack condition, except for linters processing plants. The wool industry is hurt badly, both with respect to stocks (80 percent lost) and at the processing level, and to a lesser extent at the storage level, but relatively little damage was suffered to 1958 production. The tobacco industry was hurt badly at all levels except for 1958 production. Merchantable standing timber supplies will be very good postattack, especially after D+90. There should be no long-term ill effects upon the naval stores industry in view of the relatively light loss to basic production or stocks, and normal underuse of processing facilities will permit easy absorption of the blow, even for the period prior to D+90. Strategic oils are hard hit at both stock and processing levels, but it is significant that basic production within this country is a small fraction of world production.

II. USDA FACILITIES AND PERSONNEL

The USDA headquarters in Washington was in an area of intense radiation, with a resultant denial time of at least 8 months by ODM standards for rehabilitation, and suffered moderate blast damage.

The relocation center for the USDA national offices suffered fallout only, but of sufficient intensity to result in a denial time of 60 to 90 days with an attentuation factor of 0.5. Even then it could be reached only by air or by a very circuitous route because of the numerous zones of higher radiation which lie between Washington and the relocation site.

The damage assessment analysis of facilities and personnel was confined to the major agencies of the Department of Agriculture, namely, the Agricultural Marketing Service, Commodity Stabilization Service, Agricultural Research Service, Forest Service, Farmers' Home Administration, and Soil Conservation Service.

In analyzing strikes, locations completely destroyed by blast and fire were determined to be total losses. Those partially destroyed or subject to fallout only were analyzed and were included in the estimates of capability for D+14 and D+90.

In summary: 82 percent of the facilities of the USDA and 72 percent of the employees are determined to have survived the attack, and to be available as of D+90. Approximately 1,100 facilities were destroyed or were rendered inaccessible for in excess of 90 days; and approximately 21,400 employees of the Department were killed by bomb effects, including fallout. Of this number, 6,400 were metropolitan District of Columbia area employees. Taking into consideration the 2-hour warning period and the probability that some officials would be flown out of the metropolitan area, it was estimated that approximately 20 percent of these USDA employees survived. The other 6,400 employees in the metropolitan District of Columbia area are included in the above total of 21,400 casualties.

A very substantial number of Department employees are headquartered at Beltsville in Prince Georges County, Md. While their location was outside of the blast or fire area, it was included in one of the extremely heavy fallout areas where earliest availability would be in excess of 1 year, hence they were considered with the other employees in the District of Columbia metropolitan area.

One of the worst hit agencies is the Commodity Stabilization Service which lost most of its commodity offices in the field, the offices which administer the stocks of food owned and controlled by the Commodity Credit Corporation and which would figure in a major way in emergency feeding of the surviving population.

However, it should be noted that each commodity office has established a relocation site which is equipped with operating records. Given a certain amount of evacuation time, these sites would be the center of their postattack activities if need be. It has not been possible, however, to determine the result of the attack on these relocation sites.

III. LAND

A. Postattack situation

Three-fourths of the total land area of the United States remained free from radioactive fallout and blast damage. The same proportion of land in farms was also free from damage. A somewhat smaller proportion (73 percent) of cropland remained undamaged while a larger proportion (80 percent) of pasture and grazing land remained clear. The following summarizes the effects of the attack on land resources:

All land—Farmland, cropland, and pasture—Total and postattack radiation coverage

Kind of land	Preattack acreage (thousand acres)	Proportion of postattack acreage by radiation coverage				
		Under 100 roentgens per hour at H-plus-1	Under 300 roentgens per hour at H-plus-1	Under 1,000 roentgens per hour at H-plus-1	Under 3,000 roentgens per hour at H-plus-1	Over 3,000 roentgens per hour at H-plus-1
		Percent				
Total land area	1,891,557	75	81	93	99	1
All land in farms	1,155,653	76	82	94	99	1
All cropland	392,449	73	79	93	99	1
All land pastured	999,740	80	85	95	99	1

Data with respect to total land area, all land in farms and all cropland are from the NDAC Print-Out Summary Category B 2–Land.

Effects of the simulated attack on pasture and grazing land were estimated by USDA. The total acreage of pasture and grazing land includes the acreage of cropland pasture and other pasture in farms, and 352,639,000 acres of pasture and grazing land not in farms. The estimated damage to this land was based on the damage pattern shown by the NDAC print-out for total land area, in all States except seven, for which the damage pattern for total farmland was used. This determination was based upon whether the pasture land was evenly distributed throughout the State or it more nearly conformed to the distribution of farmland.

The concentration of blast and thermal and fallout damage was greatest in areas 1 and 2, which include 16 Northeastern States from Kentucky, Ohio, and Virginia northeast. In these two areas, only approximately one-third of the land area had less than 100 roentgens per hour. One-fifth of the land area had a fallout intensity of 1,000 and over roentgens per hour. In addition 12 percent of area 1, and 5 percent of area 2 were affected seriously by blast and thermal damage.

Area 3 (including the Southeast) and area 4 (Midwest States) had two-thirds of the total land area free of fallout. Only 5 percent in area 3, and 7 percent in area 4 had fallout intensities of 1,000 or more roentgens per hour, and less than 3 percent was affected by blast and thermal damage. For area 5 in the Southwest, four-fifths of the land area was free of radiation damage. In areas 6, 7, and 8 (from Iowa, Minnesota, and Arizona, westward) almost 90 percent of the land area had no land damage.

The proportion of cropland having a roentgen-per-hour fallout intensity of less than 1,000 was least in the Northeastern States, where it ranged from 33 percent in Maine to 86 in New York. For the remaining States the cropland with less than 1,000 roentgens per hour intensity ranged generally from 85 to 100 percent.

The proportion of pasture and grazing land having a roentgen per hour fallout intensity of less than 300 was also least in the Northeastern States where it ranged from zero in several States to 59 percent in New York. Most all States east of the Mississippi River suffered substantial fallout damage to pasture and grazing land, whereas very few States west of the river suffered appreciable damage.

B. Denial time factors affecting land use

Cropland.—For crop production which can be obtained by farmers who are able to return to evacuated radioactive areas on one or more occasions, spending not over 2 months in the hot area while accumulating a total net dose of 200 roentgens, the following denial times have been used:

Over 3,000 roentgens per hour at H-plus 1: average 150 days denial.
1,000 to 3,000 roentgens per hour at H-plus-1: average 42 days denial.
100 to 1,000 roentgens per hour at H-plus-1: average 7 days denial.
Under 100 roentgens per hour at H-plus-1: none.

Because transportation and other difficulties will prevent some farmers from operating on the above basis, some cropland could not be used until the radiation had decayed sufficiently to permit continuous occupancy of the land. This, it is assumed, would not be possible until the net daily dose had fallen to 1 roentgen or less. On this basis, the following denial times would be appropriate:

Over 3,000 roentgens per hour at H+1: Over 1 year denial.
1,000 to 3,000 roentgens per hour at H+1: 90 days to 1 year denial.
100 to 1,000 roentgens per hour at H+1: 14 to 90 days denial.
Under 100 roentgens per hour at H+1: Up to 14 days denial.

These denial times for cropland are based wholly on external gamma radiation dosage for the farmers who operate the land. Future exercises may also consider other bases for calculating denial time and other limits on use of land, even to setting different denials or limits by crop or groups of crops based on root or foliar uptake of radioactive isotopes and the extent to which these are passed on to man or livestock, but the necessary standards for such are not available for use in Opal 58, and as a result, the availability of cropland as shown by this analysis is larger than it would be in reality with this attack pattern.

Pasture and grazing land.—Considering external gamma radiation only, denial times for use of pastures and grazing lands would need to be set separately for each type of livestock which may use the land. Generally speaking, denial times would be somewhat shorter for livestock than for humans, because most livestock can stand more radiation than can humans, especially sheep and cattle, the principal grazers. This would be true also because the consequences of getting an overdose is less in livestock since salvage for meat often would be possible. Therefore, in general, external gamma denial times for livestock might approach those indicated first above for cropland.

But it must be recognized that other factors may be more limiting than external gamma radiation for grazing livestock. For instance, radioactive iodine,

cesium, and strontium would be important, and some believe that the iodine might be the limiting factor. In Opal 58, the only recognition that has been made of this is to limit supplies of milk for fresh fluid use to those produced on land with less than 10 roentgens at H+1. Future exercises may have more complete information on which to base denial time or absolute limitations on use of pastures and grazing land by livestock. Were these standards available now, the availability of pasture land undoubtedly would be less than is indicated here for the immediate postattack period.

IV. FOOD RESOURCES

A. Food stocks

On farm.—Farm stocks of food and feed, as shown in the following table, were relatively unaffected by the simulated attack. The median of the percentages remaining postattack was 96.4 with a range from 84.4 to 99.6. In the aggregate, only a very small proportion of on-farm stocks was in areas of blast and burn. Some stocks would be physically contaminated by fallout. An arbitrary assumption was made that farm stocks lost from all causes was equal to the preattack amount in areas subjected to a fallout intensity in excess of 3,000 roentgens per hour as of H+1. All other stocks were assumed saved, and a large majority will be available at D+14.

On-farm stocks of feed grains constitute a large reservoir of potential food for human consumption, should it become necessary to use these commodities as food. For example, if on-farm corn stocks were converted to cornmeal, they would extend the food supply for approximately 1 year. These farm stocks, because they are normally used for animal feed primarily, have not ben included in the estimates of remaining man-days of food supply in the following section of this report.

Estimated preattack and postattack quantity and percentage remaining of on-farm stocks of food and feed grains, hay and white potatoes for the United States

Commodity	Preattack quantity	Postattack quantity	Percentage remaining
	Thousand pounds	*Thousand pounds*	*Percent*
Grains:			
All wheat	8,603,940	8,571,420	99.6
Rye	420,168	401,072	95.4
Corn	82,872,104	80,989,776	97.7
Oats	11,876,192	11,566,752	97.4
Barley	4,670,496	4,581,120	98.0
Sorghum grains	3,199,280	3,050,208	95.3
Soybeans	4,654,200	4,347,240	93.4
Rice (rough)	151,000	127,600	84.5
Hay	52,962,000	51,712,000	97.6
White potatoes	334,200	282,000	84.4

Off farm.—This section summarizes the effect of the assumed attack pattern on off-farm consumable food stocks; off-farm stocks of grain and other farm products; and provides an analysis of the total man-days food supply in all positions for the United States.

1. Consumable food stocks: The United States summary of all off-farm consumable food stocks in commercial channels, except retail, that may be directly consumed without further processing is contained in the following table. These

stocks are estimated for 6 major food groups and 16 food subgroups. In order to provide a nutritionally adequate diet, part of the daily food consumption should come from each of these six major groups. Food supplies in the subgroups within a major group, however, may be substituted for each other.

Estimated preattack and postattack quantity and remaining percentage of off-farm stocks of consumable food, by groups and subgroups for the United States [1]

Food group and subgroup	Preattack quantity	Postattack quantity	Percentage remaining
Meat and meat substitutes:	*1,000 pounds*	*1,000 pounds*	*Percent*
Meats, fresh, frozen, and processed	799,400	241,500	30
Poultry, eggs, and seafood	724,320	422,622	58
Dry beans and nuts	1,330,369	969,854	73
Milk group:			
Fluid milk	336,806	97,040	29
Dry milk and cheese	659,268	348,081	53
Evaporated and condensed milk [2]	215,925	147,827	68
Fats and oils, food:			
Butter and margarine	216,126	67,907	31
Other fats and oils	1,319,199	318,300	24
Grain products:			
Flour and cereals	1,664,577	1,199,713	72
Bakery products	286,285	129,989	45
Fruits and vegetables:			
Fruits, fresh, canned, and frozen	3,939,000	2,004,000	51
Vegetables, fresh, canned, and frozen	5,615,000	3,120,000	56
Potatoes, white	191,000	58,000	30
Dried and concentrated (fruits and vegetables)	422,000	188,000	45
Sugar and sweets:			
Sugar, all types	4,060,568	2,882,512	71
Sirup and other sweets	465,282	280,671	60

[1] Includes all off-farm consumable food stocks in commercial distribution channels, except retail inventories. Consumable food includes all supplies that may be used directly for human consumption without further commercial processing.
[2] Includes ice cream.

As indicated in the above table, the assumed attack reduced many of the basic food stocks to less than one-third of the original preattack quantity. Other fats and oils, for example, were reduced to only 24 percent of the preattack supply; fluid milk to 29 percent; butter and margarine to 31 percent; fresh, frozen, and processed meat supplies to 30 percent; white and sweet potatoes to 30 percent. Most of the damage to fluid-milk supplies was caused by radioactive fallout, while the bulk of the stocks of fats and oils and processed-meat supplies was located in or near major target-area cities where bomb and fire damage was especially severe. Most of the stocks of such items as dry beans and nuts, flour and cereal products, and refined sugar, however, were more widely dispersed and over two-thirds of the original supply remained in the postattack inventory.

2. Stocks of grain and other farm products: This group consists of the major off-farm and feed-grain stocks, off-farm stocks of peanuts and such other farm product raw materials as listed in the following table. Most of these stocks are rather widely dispersed in rural areas, and two-thirds or more of the preattack quantity remains in the postattack period for most of the commodities. The most outstanding exception is off-farm stocks of rough rice with 58 percent of the original supply.

Estimated preattack and postattack quantity and remaining percentage of off-farm stocks of food and feed grains, peanuts, and other farm products for United States

Grains and other farm products	Preattack quantity	Postattack quantity	Percentage remaining
Grain stocks:	*1,000 pounds*	*1,000 pounds*	*Percent*
Wheat, all	52,429,260	34,051,080	65
Rye	391,608	270,816	69
Corn	28,345,016	18,877,992	67
Oats	1,815,936	1,186,272	65
Barley	5,374,464	3,459,792	64
Sorghum grain	18,110,176	13,393,352	74
Soybeans	6,855,420	4,452,600	65
Rice, rough	2,381,300	1,375,480	58
Peanuts (unshelled)	637,432	440,071	69
Other products: [1]			
Cotton	5,418,240	4,271,040	79
Tobacco, leaf (all types)	4,025,000	2,441,000	61
Wool	148,388	27,978	19
Naval stores	287,334	245,196	85

[1] See pt. V for discussion.

3. Man-days of food supply: In order to provide a direct comparison between the various kinds of food in all positions for the United States and to determine how long the surviving population may be fed from remaining food stocks, the entire post attack food supply was converted to equivalent man-day units. Each man-day unit consists of sufficient quantities of food to provide an average of 2,200 calories per person. This is the official daily calorie level to be used for each surviving person during the exercise. Separate conversion factors were used for each of the different types of food listed in the following table:

Estimated man-days inventory of preattack and postattack food supplies in all positions for the United States

Selected food items	Preattack quantity	Postattack quantity	Percentage remaining
Consumable food groups: [1]	*1,000 man-days*	*1,000 man-days*	*Percent*
Meat and meat substitutes	1,596,159	957,946	60
Milk group	615,248	323,000	52
Food fats and oils	2,747,192	686,175	25
Grain products	1,450,632	1,000,473	69
Fruits and vegetables	986,830	500,360	51
Sugar and sweets	3,407,920	2,397,873	70
Subtotal	10,803,981	5,865,827	54
Selected crops: [2]			
Wheat, all	32,347,596	22,589,925	70
Rice, rough	1,240,827	736,509	59
Soybeans	5,179,329	3,959,928	76
Peanuts	369,711	255,241	69
White potatoes	46,788	39,480	84
Subtotal	39,184,251	27,581,083	70
On farm livestock: [3]			
All cattle (dressed out)	15,236,993	13,073,340	86
Poultry	465,104	325,107	70
Hogs	2,190,489	1,769,915	81
Subtotal	17,892,586	15,168,362	85
United States total (man-days)	67,880,818	48,615,272	72

[1] Includes all directly consumable food stocks in off-farm distribution channels, except retail inventories and household food supplies. Retail and household supplies are assumed to be equivalent to about 2 weeks of normal consumption or through D-plus-14 for opal 1958.

[2] Includes on-farm and off-farm stocks of wheat, rough rice, and soybeans; off-farm stocks of peanuts; and on-farm stocks of white potatoes. Other grains, such as corn and oats, that might, under extreme emergency, be used directly as human food are not included.

[3] Consists of the man-day equivalent of the estimated dressed weight of all cattle, poultry, and hogs on farms. These totals include milk cows, and the total livestock breeding herd on all farms. No estimates were prepared for sheep, lambs, and goats.

Man-days of consumable food as reported in the above table includes all off-farm stocks in distribution channels, except retail inventories and household food supplies. These retail and household stocks are generally equivalent to about 2 weeks of normal consumption and they are considered adequate to feed the surviving population through D-plus-14.

The population assumed to be surviving on D-plus-30 could be fed the following number of days by the postattack quantity of food shown in the preceding table.

Food group:	*Number days*
Consumable food	44
Selected crops	205
On-farm livestock	113
Total, all groups	362

Only slightly more than half (54 percent) of the preattack consumable food supply remained postattack, but 70 percent of the selected crops and 85 percent of the on-farm livestock supply remained. Under selected crops, the entire remaining stocks of wheat, rough rice, soybeans and peanuts were included as man-days of food supply. Obviously these crops would not be consumed directly as food without further processing except under extreme emergency conditions.

The dressed weight of all the cattle, poultry, and hogs on farms was included in the man-day calculation for on-farm livestock. This includes all of the milk cows and the entire farm breeding herd. Such a procedure is completely unrealistic from a practical standpoint, but the data are intended to show what could be done if the situation were serious enough to warrant such drastic action.

B. Crop production

In considering these estimates of postattack crop production, it should be noted that only specified types of possible losses have been considered. These are specified in part I above. Crop losses are indicated below by general type, and are specified by crop in the following table.

Food crops.—Damage to food crops was substantial, ranging from 1 to 30 percent loss. Rice suffered 30 percent damage, otherwise the food grains received only slight damage. Hardest hit food crops were fresh and processing vegetables. The damage to vegetables was most severe in the Northeast, particularly in area 1 and to a lesser extent in areas 2 and 3. The potato and sweetpotato crops received substantial damage in area 3 of the Southeast. Noncitrus fruit and tree nuts received considerable damage in the northeast area 1 and in area 2.

Feed crops.—With the exception of corn and to a lesser extent, soybeans, feed crops did not experience heavy losses on a national basis. The loss of 15 percent of the corn crop was due largely to heavy losses in the eastern Corn Belt States, particularly in areas 2 and 4. Soybean losses were spotty throughout the producing States. Hay losses were most severe in the East in areas 1, 2, and 3 and in the West Coast States. There was only a 4-percent estimated loss in the cotton crop. This damage occurred largely in the eastern Cotton Belt included in area 3. Tobacco had an estimated 15-precent loss, which was evenly distributed among the major types.

Crop summary—Estimated 1958 production remaining after loss from fallout and burn, United States

Commodity	Unit	Preattack estimate of production	Estimated amount remaining	Percent of preattack production
Foods:		*Thousands*	*Thousands*	*Percent*
Winter wheat	Bushel	1,009,754	997,905	99
Spring wheat	do	171,254	168,869	99
Rye	do	28,546	26,895	94
Rice	100 pounds	42,975	30,029	70
Peanuts	1,000 pounds	128,524	93	
Sugar beets	Tons	13,668	13,117	96
Sugarcane	do	7,711	7,623	99
Dry beans	100 pounds	16,758	15,897	95
Vegetables, fresh:				
30-day supply	1,000 hundredweight.	20,370	17,113	84
90-day supply	do	74,800	62,854	84
Vegetables, processing:				
30-day supply	1,000 tons	114	83	73
90-day supply	do	740	621	84
Potatoes and sweetpotatoes:				
30-day supply	1,000 hundredweight.	13,110	11,799	90
90-day supply	do	45,300	43,483	96
Noncitrus fruits and tree nuts:				
Total production 1958 crop	1,000 tons	9,238	8,731	94
30-day supply	do	16	14	88
90-day supply	do	1,395	1,320	95
Citrus fruit:				
Total production, 1958–59 crop	do	7,500	7,356	98
30-day supply	do	496	465	94
90-day supply	do	1,008	957	95
Feeds:				
Corn	Bushel	3,070,834	2,621,408	85
Oats	do	1,138,550	1,091,957	96
Barley	do	382,740	366,905	96
Sorghum, grain	do	467,402	445,213	95
Soybeans for beans	do	501,558	463,902	92
All hay	Tons	105,009	100,838	95
Other crops:				
Cotton	Bales, gross weight	9,989	9,556	96
Tobacco, total types 11–37	Pound	1,355,164	1,156,472	85
Flue cured types 11, 12, 13, 14	do	849,901	733,139	86
Fire-cured and dark air-cured types 21, 22, 23, 35, 36, 37.	do	56,393	48,542	86
Light air-cured types 31, 32	do	448,880	374,791	83

C. Livestock production (including meat, dairy, and poultry production)

A critical shortage of fresh milk for fluid consumption resulted from the attack. Meat animal losses from fire and fallout were less than for human population. On a per capita basis, red, and possibly poultry, meat supplies will be relatively high in relation to many foods due to the need to slaughter meat animals, dairy cows, and possibly poultry, which have received excessive radiation dosages. Supplies of poultry meat will be fairly good in any case. Egg supplies vary widely by regions and are very short in the heavily populated areas of the East, and the Pacific coast.

Only 10 percent of the preattack production of milk (or 20 percent of remaining production) can be used for fluid consumption during the first 30 days, assuming that all cows were on pasture following the deposition of fallout. On this basis, in area 2, virtually no milk is safe for use in fluid form. About 50 percent of the preattack milk production is remaining and usable for manufactured dairy products during the first 30 days after the attack. Milk production usable for fluid consumption is expected to increase substantially by D-plus-90,

at which time total milk production should reach 72 percent of the preattack rate.

Losses of livestock were moderate in relation to losses of human population. Approximately 15 percent of the cattle, sheep, and lambs, and about 19 percent of the hogs were destroyed by the attack. Losses varied considerably by areas, ranging from about 30 to 40 percent of the cattle in areas 1 and 2 to only about 6 percent in areas 6 and 8. Sheep and lamb losses were rather high in areas 1 and 2, but substantial losses in heavy sheep-producing areas occurred only in area 7 where about one-fifth of the sheep and lambs were lost. However, in areas 5, 6, and 8 (the heaviest producing States) loss of sheep and lambs was less than 10 percent. Losses of hogs also were heaviest in areas 1 and 2, and slightly more than average in the eastern Corn Belt (area 4). Losses of hogs were only about 8 percent in the western Corn Belt (area 6), which is the center of hog production. Since livestock losses were about the same or less, percentagewise, as population losses, no serious shortage of livestock for slaughtering purposes is expected, particularly in view of the need to slaughter some livestock to avoid later death losses due to excess radiation.

Poultry production has been severely affected. Over one-fifth of the Nation's broilers have been killed and nearly one-third of all hens on farms are sick or dead. Production of eggs during the 30-day period following attack may be reduced by 30 percent. Thereafter, the increase in production of eggs fit for human use should be fairly sharp, but it is impossible to forecast this gain with accuracy.

This analysis of attack damage to livestock production has been made on the basis of the effects of fire and fallout only upon live animals, and it assumes the availability of electric power, transportation, labor, distribution facilities, etc.

The following table summarizes the livestock losses for the Nation.

Losses of livestock and livestock products (United States totals)

Item	Unit	Remaining after attack	
		Units	Percent
All cattle	Million head	80.6	86
Milk cows and heifers	do	16.0	[1] 72
All hogs	do	52.7	81
All sheep and lambs	do	36.2	84
Hens and pullets (of laying age)	do	202.7	[1] 70
Commercial broilers	do	3.9	77
Milk and egg production, 1st 30 days following attack:			
Usable milk	Billion pounds	1.3	10
Eggs	Billion eggs	3.8	70

[1] Not sick or dead.

D. Food processing, storage, and distributing facilities

Damage assessment was made of 60 different types of food and related commodity processing, storage, and distributing facilities. The United States total preattack capacity of each type of facility was used as a base for measuring loss from blast and burnout and inaccessibility due to radioactivity. Percentages of United States preattack capacity remaining on D-plus-14 and D-plus-90 were calculated for each State and area. Such percentages, being on the same base, also permit the easy calculation of the percentage of each State's loss.

Severe damage was sustained by the meatpacking industry. Only about a quarter of the livestock-slaughtering facilities were undamaged and accessible

on D-plus-14. Conditions would be only slightly improved on D-plus-90, when an additional 11 percent would become accessible due to decay of radiation.

Poultry and egg facilities were damaged (or inaccessible) less severely than meat facilities, with about three-quarters of the facilities remaining undamaged and accessible as of D-plus-14.

Fruit and vegetable facilities incurred substantial damage. About 50 percent of the preattack capacity of these facilities was undamaged and accessible by D-plus-14. By D-plus-90, about 70 percent would be available.

Damage and inaccessibility ranged from 41 to 74 percent of the United States preattack capacity in the dairy products industry. Ice-cream facilities were the most severely damaged or radioactive, followed by cheese plants, condensed- and evaporated-milk facilities, dry-milk plants, and butter manufacturers. By D-plus-90, the undamaged and accessible facilities in these 4 groups would range from 48 to 80 percent of preattack capacity.

Flour mills and wholesale and retail bakers would have lost more than 50 percent of preattack capacity by D-plus-90. A severely limiting factor, even on this remaining capacity, would be the extreme loss sustained by the yeast industry, 97 percent of preattack capacity.

While as of D-plus-14 sugar-beet plants suffered relatively minor damage, the loss of about four-fifths of cane-sugar refining capacity would have serious impact on the availability of sugar. By D-plus-90, nine-tenths of sugar-beet plant capacity would be available in contrast to less than one-fourth of the cane-sugar refining capacity.

Even though oilseed crushers sustained severe damage, about one-half of preattack capacity, vegetable and animal oil refineries had only 14 percent of preattack capacity remaining on D-plus-14. An additional 3 percent would become available on D-plus-90.

Coffee roasters sustained heavy damage, with only 10 percent of preattack capacity remaining on D-plus-90.

The heaviest losses of United States food-processing capacity occurred in area 4.

Storage facilities sustained substantial damage and radioactivity.

Only 35 percent of the United States preattack capacity of rice warehouses would have been available on D-plus-14, with an additional 20 percent becoming available by D-plus-90.

Storage facilities for naval stores were available on D-plus-14 only to the extent of 50 percent of preattack capacity. At D-plus-90, there would be 82 percent of capacity available.

Damage and inaccessibility due to radiation was less severe on Commodity Credit Corporation grain bins as of D-plus-14 (84 percent available) than on the emergency grain fleet which would have been available only to 60 percent of its preattack capacity on D-plus-14. As of D-plus-90, 94 percent of the grain-bin capacity would be available and all of the emergency grain fleet capacity would be accessible. Commercial grain storage at D-plus-90 would be at 60 percent of the preattack capacity.

The principal grain-storage facility damage was in area 6.

Food-distribution facilities (chainstore and other wholesale warehouses) sustained substantial damage, with only 20 percent of their preattack capacity being available as of D-plus-14. By D-plus-90, the percentage available would have increased to only 44 percent.

The principal area of damage to food distribution facilities occurred in area 1.

Facility capacity damage analyses

Processing facilities	United States preattack capacity or normal production [1]	Percent remaining	
		D-plus-14	D-plus-90
Dairy products:			
Butter	1,409,000,000 pounds annually (p)	59	73
Ice cream	591,000,000 gallons annually (p)	26	48
Condensed and evaporated milk	2,616,000,000 pounds annually (p)	46	80
Dry milk	1,626,000,000 pounds annually (p)	51	73
Cheese	1,381,000,000 pounds annually (p)	37	56
Fruits and vegetables:			
Canned fruits and juices	160,000,000 cases annually (p)	47	66
Frozen fruits and juices	1,800,000,000 pounds annually (p)	58	79
Canned vegetables and specialties	400,000,000 cases annually (p)	44	62
Frozen vegetables	1,800,000,000 pounds annually (p)	55	73
Dehydrated potatoes and potato starch.	400,000,000 pounds annually (c)	64	89
Flour and cereals:			
Flour mills	1,000,000 hundredweight daily (c)	[2]	44
Bakers	[3]	[2]	48
Yeast manufacturers	320,000,000 pounds annually (c)	3	27
Wet-corn mills	157,000,000 bushels annually (p)	0	23
Rice mills	543 hundredweight daily (c)	35	43
Macaroni and related products	[4]	[2]	21
Meats, poultry, and eggs:			
Total FIS	655,000,000 pounds (carcass weight) weekly (c).	24	35
Total non-FIS	170,000,000 pounds (carcass weight) weekly (c).	25	37
Poultry slaughter	7,373,000,000 pounds (live weight) annually (p).	76	[2]
Egg processors	347,000,000 pounds annually (p)	76	[2]
Feed manufacturers	21,000,000 short tons annually (c)	24	46
Meat canners	100,000,000 pounds weekly (c)	16	38
Poultry canners	227,000,000 pounds (RTC) annually (p)	56	[2]
Oils and peanuts:			
Vegetable-and animal-oil refiners	40,000,000 pounds daily (c)	14	17
Oilseed crushers	68,000 tons daily (c)	48	56
Peanut-butter manufacturers	2,000,000 pounds daily (c)	18	22
Peanut cleaners and shellers	15,000 tons daily (c)	50	76
Sugar and cocoa:			
Sugar-beet plants	146,000 short tons beets daily (c)	75	92
Sugarcane mills	106,000 short tons cane daily (c)	94	94
Cane-sugar refiners	8,900,000,000 short tons sugar annually (c).	19	24
Cocoa-bean grinders	614,000,000 pounds annually (p)	0	44
Beverages: Coffee roasters	12,000,000 pounds daily	4	10

Storage facilities [4]	United States preattack capacity of inventories [5]	Percent remaining	
		D+14	D+90
Commercial grain storage	3,497,000,000 bushels (c)	[2]	60
Emergency fleet	52,000,000 bushels (i)	60	100
CCC grain bins	988,000,000 bushels (c)	84	94
Rice warehouses	97,000,000 hundredweight (c)	35	55
Chainstore and other wholesale warehouses.	1,500,000,000 inventory at cost (i)	28	44
Industrial feed molasses storage	345,000,000 gallons (c)	53	56
Naval stores	1,125,000 standard barrels pine gum (c)	50	82

[1] Capacity for normal work period. Capacity figures indicated by (c), production by (p).
[2] Not calculated.
[3] Capacity not available; calculated on basis of number of employees.
[4] Plants; capacity not available.
[5] Capacity figures indicated by (c), inventories by (i).

NOTE.—Damage analysis was also made for the following facilities, the details of which are not shown here: Cotton linters bleachers; cotton gins; cotton warehouses; wool storage; cigarette manufacturers; public general warehouses, refrigerated; meat packers' refrigerated storage; private and semiprivate refrigerated storage; cigar manufacturers; leaf-tobacco dealers and manufacturers; tobacco redrying plants; chewing and smoking tobacco and snuff; gum-turpentine storage; public apple houses, refrigerated; frozen-food locker plants: sharp freezers, 0° storage.

V. OTHER AGRICULTURAL COMMODITIES AND RESOURCES

A. Cotton

Generally speaking, the cotton industry survived the attack in relatively good condition, with the linter situation presenting the only real problem.

Production.—With 87 percent of the acreage in areas having a fallout intensity of less than 100 r/hr., the damage to the 1958 crop, ignoring other factors, is relatively insignificant. With 96 percent of the indicated production remaining, no immediate problem with respect to cotton production exists.

Stocks.—With preattack stocks of cotton of approximately 11.4 million bales, of which approximately 9 million remain in postattack stocks, no problem with respect to total cotton supplies will exist.

Cotton gins.—Ginning facilities postattack will be available for about for times the estimated production. Since these gins are widely dispersed in rural areas outside of target areas, ginning would not start until July and because the damage analysis estimates placed less than 5 percent of the ginning capacity within the target or burned out areas, there is no problem with respect to ginning capacity.

Cotton warehouses.—With 77 percent of cotton warehouse capacity remaining after attack, there is no problem with respect to warehouse capacity for cotton storage.

Linter processing plants.—With 60 percent of the linters processing capacity destroyed, it would appear that steps would have to be taken to insure full operation of the remaining 40 percent. It should be noted that chemical linters and linters pulp are strategic war materials.

B. Wool

Only about 5 percent of the 1958 wool clip has been lost. However, it is estimated that about 80 percent of the domestic and imported wool in storage is lost. Losses of wool in storage vary from only about 10 to 15 percent in area 5 (which includes Texas) to 95 percent or larger losses in areas 2, 3, and 7. About 85 percent of the wool storage facilities are lost, but it appears that enough facilities remain for storage of the 1958 wool clip and any wool which might be imported. Facilities which have been used in the past for wool storage far exceed the capacity which is actually needed at any one time, and additional storage facilities could be improved if necessary. However, there appears to be a serious shortage of wool carbonizing and scouring facilities with only about 4 of more than 50 such firms in operation after the attack.

C. Tobacco

Estimated 1958 production of tobacco.—It is estimated that ony about 15 percent of the 1958 production of tobacco is lost. Most of the United States production falls in areas 2 and 3. The losses do not vary greatly between the major producing States.

Off-farm stocks of leaf tobacco.—It is estimated that 39 percent of off-farm stocks of leaf tobacco were destroyed. Availability of these stocks would be the same as estimated for storage facilities since it is assumed that denial time would be based on class 2 workers, continous operations.

Tobacco facilities.—Damage assessments were made for cigarette manufacturing; cigar manufacturing; smoking, chewing, and snuff; and leaf storage. Denial time for the following assessments insofar as fallout is concerned is based on dose limits for class 2 workers, continuous operations:

(*a*) Cigarette industry: The loss of the facilities in the attack was quite severe, accounting for approximately two-thirds of the preattack capacity. Practically all of the cigarette manufacturing facilities are located in areas 2 and 3. Only about 9 percent of the capacity was clear at D-plus-14. However, all of the capacity not destroyed (33.5 percent) would be clear by D-plus-90. North Carolina was hardest hit, followed by Kentucky. There are six major cigarette producing cities in the United States; namely, Durham, Greensboro, Reidsville, and Winston-Salem, N. C.; Louisville, Ky.; and Richmond, Va. Only Reidsville and Richmond were not target areas.

(*b*) Cigar manufacturing facilities: Loss of cigar manufacturing facilities was very severe in all areas. However, the bulk of the facilities are located in areas 2 and 3. Of the total United States capacity, it is estimated that only about 12 percent would be available at D-plus-14 and only 27 percent at D-plus-90.

(*c*) Smoking, chewing, and snuff manufacturing: Our appraisal indicates that these facilities suffered more severely than any other segment of the tobacco

industry. All of the major producing cities except Richmond, Va., were in target areas. It is estimated that only about 9 percent of preattack capacity would be available at D-plus-90.

(*d*) Tobacco redrying facilities: Many of the tobacco redrying facilities are located in the smaller towns of North Carolina, Kentucky, and Virginia. Therefore, these facilities did not suffer the losses experienced by manufacturing facilities. It is estimated that 59 percent were available at D-plus-14 and 72 percent as of D-plus-90.

(*e*) Facilities for storage of leaf tobacco: This appraisal is based on the location of leaf tobacco stocks since information is not available with respect to actual facilities. Loss of leaf tobacco storage facilities was not as severe as the manufacturing plant losses. As in the case of redrying facilities, much of the tobacco is stored at small towns and in outlying areas. The bulk of the storage facilities are located in North Carolina, Kentucky, and Virginia. It is estimated that 34 percent would be available at D-plus-14 and 49 percent at D-plus-90.

D. Merchantable standing timber resources

The situation on postattack supplies is relatively favorable. The situation is summarized briefly as follows:

Time after attack:	*Percent of preattack supplies available at specified time*
D-plus-14 days	68.0
D-plus-14–90	90.0
D-plus-90–365	97.5
D-plus-1 year or more	98.0

These estimates reflect direct blast and burnout, including wildfire, and denial time for timber operators. It does not reflect other related factors which might indicate the amount of this timber which would be harvested at any given time after attack.

E. Gum naval stores

Crude pine gum production is likely to be significantly curtailed only for periods up to 90 days under conditions assumed in Operation Alert 1958. After D-plus-90 days and up to 1 year, output volume should be about 87 percent of normal. After D-plus-1 year, production throughout the region should average close to preattack normal. Thus, assuming availability of manpower and material for production, there should be no long term effect on output. The short term effect is likely to be significant only if, as in the current exercise, D-day occurs during the heavy production season. However, even in such an eventuality the effect of a temporary reduction in output will be mitigated fully by CCC gum rosin stocks and, to a lesser extent, CCC gum turpentine stocks which will be largely intact.

On May 1, about 99 percent of gum rosin stocks and 57 percent of gum turpentine stocks were concentrated in the southeastern producing region (area 3). Although losses are very heavy in all other areas, production belt stocks are not significantly affected. Thus, in area No. 3 (the production belt) 87 and 86 percent of the preattack gum rosin and turpentine stocks, respectively, will be intact at D-plus-90. In all other areas only 1 percent of the rosin and 13 percent of the turpentine will survive. Overall, 87 and 54 percent of preattack gum rosin and turpentine stocks, respectively, will still be available at D-plus-90.

At present only about 60 percent of pine gum processing capacity (based on a 12-hour day and 6-day week) is being used. Consequently, facilities remaining after the attack should be sufficient, initially, to handle the temporarily reduced postattack output and, after 90 days, a volume about 40 percent greater than current production. There will remain at D-plus-14, 50 percent of preattack United States capacity and, at D-plus-90, 82 percent of United States capacity before the attack. Processing facility loss will be serious only in Florida where about 30 percent of preattack capacity will remain at D-plus-90. Excess Florida gum initially can be diverted to nearby south Georgia plants. Eventually some of the excess processing capacity in south Georgia might be transferred to Florida.

As of May 1, 1958, only about 15 percent of turpentine storage capacity was being used. Therefore, the 52 and 64 percent of original United States capacity remaining at D-plus-14 and D-plus-90, respectively, should be adequate, particularly since increased demand for turpentine during emergencies results in lower requirements for storage facilities.

F. Strategic oils

Agencies other than the United States Department of Agriculture are responsible for estimating losses to the national stockpiles of strategic oils. Except for castor oil, supplies of these oils are dependent on offshore procurement. Thus, postattack supply availability would depend on quantities remaining in the national stockpiles and availability of overseas supplies and ocean transportation.

Castor oil.—Preattack commercial stocks of castor oil were 31 million pounds. Not only were all castor bean crushing facilities destroyed, but also it is estimated that approximately three-fourths of the commercial stocks were destroyed, leaving only about 7 million or 8 million pounds of castor oil available. The major sebacic acid manufacturing establishment was not destroyed, but it is not available at D-plus-14. The preattack 1958 crop domestic production of castor beans is estimated at 30,000 tons. Analyses of the areas planted to castor beans indicate that about 95 percent of the crop should be available. This represents about 25 million pounds of oil. There are available cottonseed crushing mills in the areas of production of castor beans which can be used for crushing.

Coconut oil.—Preattack commercial stocks of coconut oil were 60 million pounds. Approximately 80 percent of these stocks were destroyed with the destruction of all of the currently operating coconut crushing mills. Remaining stocks are mostly in the hands of soapmaking establishments scattered throughout the country.

Palm oil.—Commercial palm oil stocks preattack were about 19 million pounds. Palm oil stocks postattack would be related to destruction in the steel and tinplate industry.

Sperm oil.—Figures on the size and distribution of commercial holdings preattack are not available. However, it is felt that a large proportion has been destroyed, as these are usually maintained in port cities which have been mostly destroyed.

EXHIBIT 5

UNITED STATES DEPARTMENT OF AGRICULTURE,
Washington, D. C., August 11, 1958.

HON. LEO HOEGH,
Director, Office of Defense and Civilian Mobilization.

DEAR GOVERNOR HOEGH: In transmitting the report of the Department of Agriculture covering our participation in Operation Alert 1958, we want to stress two matters, the importance of which was emphasized by our experience in this exercise.

The first and foremost problem is one that requires top determinations as soon as feasible concerning the organizational structure of the emergency food agency, and its relationship to the existing (normal) peacetime organization, and to your Office. Solution of this problem is a prerequisite to further sound and effective emergency planning, and we hope that it will be possible to arrange joint discussions in the early future.

The second problem is indirectly related to the first. Time did not permit the full evaluation of the effects on our food supply of the damage which resulted from the simulated attack on such resources as transportation, power, manpower, fuel, and others. We feel rather strongly that the impact on the food situation would have been more serious than tentative conclusions indicated. However, even without full evaluation of the effect of the losses of these other resources, it was evident that serious problems would exist in the distribution and further production of food.

It has become increasingly evident to us that for a number of weeks and perhaps longer following such an attack it would be impossible to exercise any national or even regional direction of food management and many other resource management activities. To us this emphasizes the absolute necessity for the establishment of a national food organization and its field components, down to the local level, with standby authority to carry out prearranged plans in the food field. We think it essential that the experience and know-how of the thousands of field employees of the Department of Agriculture be fully utilized through advance training and delegation. After the organizational and responsibility questions referred to above are resolved we can begin work in this direction.

We are transmitting herewith the following reports on the participation of this Department in Operation Alert 1958:

1. Evaluation Reports for Operation Alert 1958, Phase II
2. Special Report on Opal 1958 by OPAL Food Agency
3. Special Report on Rural Fire Defense

A classified section is transmitted under separate cover.

Sincerely,

TRUE D. MORSE, *Acting Secretary.*

EVALUATION REPORTS FOR OPERATION ALERT 1958, PHASE II

Operation Alert 1958: OPAL Food Agency's response to program memorandum X–14, annex No. 6, dated May 29, 1958

SECTION I. ORGANIZATIONAL ARRANGEMENTS AND OPERATIONAL ASSIGNMENTS

A. Did your employees know the organization unit in which they would work? (At the relocation site.)

Employees at relocation site knew the organization unit in which they would work.

B. Did employees know their specific assignments?

Employees knew their specific work assignments. Specific assignments were made before site was activated.

C. Were your emergency assignments satisfactory? If not, what specific revisions do you suggest?

Emergency assignments were satisfactory. Program leaders held prealert meetings of their staffs, which made for smoother and efficient alert operations.

D. Are present Federal-State relationships effective for emergency operations? If not, what specific improvements do you suggest?

Federal-State relationships have been established to provide adequately for a number of essential defense services. However, there are numerous other areas of defense responsibility where national policies and procedures need to be developed; for example, in those types of circumstances enumerated in operational capability task force questionnaire of July 1, 1958, in questions 7 (a) through 7 (e). OFA, in response to this questionnaire, recommended that OORO develop and issue national policy, implementation, and instructions to cover such situations. Further efforts to develop such desirable Federal-State arrangements are dependent not only upon further organizational determinations and assignments for OPAL Food Agency, but also upon similar developments with Office of Defense and Civilian Mobilization and State organizations for defense.

E. Was your field organization as used in the exercise satisfactory in such an emergency? If not, what specific steps will be taken to improve them? (Relate this to the operational capability of your relocated headquarters.)

Our field organizational pattern has not been developed below the regional liaison representative's office. To carry out damage assessment and supply requirements work for OPAL 1958, a number of Department field offices at the State level were designated to function as OFA instrumentalities. Experience gained during OPAL 1958 and in previous exercises has pointed up the kind of organization we need, and we are now in a position to establish such an organization as soon as the determination is made as to the character and responsibility of the OFA organization. Our plan envisions a completely integrated organization from national headquarters to local levels with prepositioned authorities to permit action that may be necessary at any level in case of a communications breakdown.

It was determined in advance that problems in biological and chemical warfare against livestock and crops would not be proposed for nor developed during Operation Alert 1958. Thus, the Department's capabilities in this field were not tested.

The State-Federal emergency animal disease eradication organizations are established in each State and are on a standby basis. Emergency operations in plant pest control are also established on a State-Federal cooperative basis. Peacetime emergency problems are providing practical operating experience in these activities.

For rural fire control the operating organization in the field is the same as that which functions for normal peacetime fire control. Since the capability of this organization is not adequate as to size and equipment for certain locations for control of fires under peacetime conditions, it could not cope with the emergency conditions in such locations.

F. Were the OORO delegations, orders, and exercise directives representative of a unified policy and organizational approach? If not, cite specific examples.

The OPAL 1958 exercise did not disclose a lack of a unified policy and organizational approach. However, there are a number of questions on some of the orders and directives that need further study and clarification.

It is recommended that the policies and approach as applied to OFA be reconsidered in light of the operational capabilities of the Department of Agriculture field organization which would make up the field units of a food agency in a real emergency.

Under increasingly massive-attack patterns (such as that used in the Standards for OPAL 1958), it is doubtful that regional offices would suffer less damage than national headquarters offices or that communications between regional offices and State and local offices would be any more effective than those between national headquarters directly to the State and local levels.

In the event of an OPAL 1958 type attack, we believe that for a considerable period followng the attack only limited action would be possible outside local levels. A trained and well-informed organization at county and State levels would appear to be the most effective means for the food agency to carry out its responsibilities during this period. The Department of Agriculture has at least one organization and office in each agricultural county in the United States and several in practically every State. In the event of an attack, these offices would be capable of maximum emergency efforts. The Department of Agriculture is not organized on a regional basis.

OPAL Resources Directive No. 1, used in Operation Alert, should be reviewed to assure that the priorities and allocations authority is available to the food agency with reference to all foods as defined in OPAL Edward (p. 22), including inedible as well as edible items, and the domestic distribution of farm equipment and commercial fertilizer. The provisions of section 2 of Resources Directive No. 1 relating the priorities and allocations authority to survival items and the language of appendix B specifying items raise serious question whether the food agency has authority to issue priority and allocation orders with reference to all edible food in short supply and with reference to inedible items in the definition of food and with reference to domestic distribution of farm machinery and commercial fertilizer.

There is a question as to the degree of responsibility that the OPAL Food Agency has for rural fire defense. The delegations for rural fire in Resources Directive No. 13 of volume 23, Emergency Federal Register, delegate rural fire control to the Secretary of Agriculture. Policy Guidance and Direction for Phase II, Operation Alert 1958, in paragraph 11, page 7, also gives the responsibility to the Secretary of Agriculture for fire-control services in rural areas. On the other hand, in sections 12, 13, 14, and 15, on page 45 of the same document, it appears that the OPAL Food Agency will be responsible for determining and/or recommending priorities on manpower, equipment, fuel, supplies, etc., needed for fire control.

There also is a problem concerning delegations of responsibility for forest-products production, as follows:

Policy Guidance and Direction for Phase II, Operation Alert 1958, paragraph 11, page 7, also assigns the following essential functions to the Department of Agriculture: "Directs programs * * * for national forests; protection and management, and cooperation with States for production of forest products. * * *" This delegation should be made as a continuing delegation and to the same agency responsible for rural fire defense, since many of the same personnel carry dual responsibility for these two jobs and they should not be in separate organizations. A delegation for timber production would need correlation with industrial production delegations to the Department of Commerce.

In OPAL 1958, under existing authority, the Forest Service of this Department tested part of an emergency forest products production program. The damage to standing timber was appraised. The Forest Service is the only agency having complete statistics on volume and location of standing timber.

A national plan is needed to test other jobs, such as determining:

1. Undamaged stocks of lumber, plywood, naval stores, pulpwood, and fuelwood.
2. Location and condition of logging and milling equipment for processing standing timber into primary forest products.
3. Numbers and locations of skilled personnel to convert trees into forest products.
4. Procedures for emergency production and distribution of forest products needed immediately in the defense effort.

Presumably after an attack most undamaged stocks of timber and forest products such as lumber for shelter and wood for emergency fuel and energy would be in rural areas. Skilled manpower and existing facilities to produce primary forest products will likely be in these same areas.

Cooperating with State forestry agencies, private foresters, and forest industries, the Forest Service could discharge an emergency forest products production task effectively. With continuing delegation, a national plan would be prepared to carry out this responsibility.

Delegations to the Agricultural Research Service should be expanded and brought up to date to include new areas of emergency responsibility and activity (see sec. II, par. G, below).

There may be other areas that need attention; for instance, the credit problem has not been adequately surveyed.

SECTION II. OPERATIONAL READINESS

A. Is the data from the present damage-reporting system effective (not the damage analysis OPAL 1958) for your agency's purpose at all levels? If not, how should it be improved?

The information in the national damage assessment central library is inadequate for OPAL Food Agency needs. However, arrangements have been made to supplement this information in OFA files with needed data not considered suitable for the damage assessment library. On a local basis, however, particularly during the early days after attack, actual local damage assessment and reporting are needed. (See Special Report on OPAL 1958 by OPAL Food Agency—attached—for planned action.)

Another major limitation of the damage assessment data is that it stops at a first approximation (on what we have called a horizontal basis) thereby failing to show the true picture of remaining resources for food. For instance, no consideration has been given whether gasoline and oil will be available to produce the crops for which land is available. No deduction has been made for the perishable foods that would be lost due to lack of transportation, electric power to process or preserve, or to lack of repair parts which must be had on a given day—not 1 or 2 days or a week later. No estimate has been made of the food that would not reach the consumer because of a shortage of containers of a particular type, etc. A true picture can be produced only by further study of the relationships and interdependencies of the food industry and the food-support industries and services and a net damage assessment made therefrom. The analysis also is overly optimistic in its findings because of the lack of necessary measuring sticks to account for the full effects of radiation, especially of radiation effects on livestock and to a lesser extent crop production. Also, denial time schedules seem to be too lenient in view of the blanketing nature of the fallout patterns, especially for crop production in areas 1, 2, 3, and 4.[1]

In addition we have noted the absence of damage assessment information with respect to the effects of flooding resulting from destruction of dams. We believe it desirable that arrangements be made to develop damage assessment information with respect to flooding for use in future exercises and for permanent planning purposes. Such information as areas flooded and irrigation sources lost would be extremely important to the food agency.

Federal Register, volume 23, No. 2, resource directive No. 15, outlining responsibilities for damage assessment reports, should be amended to include an assignment to the Department of Agriculture (or OFA) to report areas burned by fire, including timber damage, as this subject matter is not otherwise covered in responsibilities assigned to make damage assessment reports.

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[1] As used in this instance, the word "area" refers to USDA areas, which are the same as the ODM–FCDA regions that are being used in OPAL 1958.

B. What is the operational capability of your relocation site under such attack conditions? Include food, water, and medical supplies, communications personnel, etc., at the site as of the attack. What steps need to be taken to improve this capability?

The general operational capability of the relocation site under phase II attack conditions is good except when considering radiation hazards resulting from fallout.

Under the standards for Operation Alert 1958, because of fallout it would not have been possible to activate the Repoint relocation fully for at least D-plus-90.

An important factor affecting operational capability is the inability, for security reasons, to notify families of the location of Repoint and the provisions made for them there. This would affect morale and hence the productivity of the relocated staff.

Following is a capability commentary on basic logistic items:

Space.—Adequate office space to take care of assigned employees and housing adequate for employees and families.

Messing facilities.—Adequate to provide food service for assigned employees and families.

Food.—Existing storage facilities provide for an average of about 3 months' supply of staples for 7,000 people now resident, with only a few days of refrigerated stores and about 2 weeks of ingredients for baking. Additional refrigerated and dry storage capacity is being constructed which will provide about a 250-percent increase in each capacity. The availability of food in the area which could be used in an emergency as replenishment to food stocks kept on hand would depend upon many factors, all highly speculative.

Electricity.—Host institution generates electricity from steam condensate, with capacity to meet all but peak loads. Electricity is exchanged with public power company to meet each other's peak needs. Two available auxiliary diesel generators are adequate to provide emergency needs.

Water.—Water is obtained nearby from deep wells by submerged electrical pumps which are normally trouble free with preventive maintenance. The water supply is augmented slightly from an open reservoir containing runoff water which can be eliminated from system by a convenient cutoff valve.

Heat.—Facilities are steam heated from a central powerplant. Extensive coal stocks contain about 60 days' supply at optimum use.

Medical facilities.—No Federal medical service, equipment, or supplies are on site. Host institution operates a 55-bed infirmary, and a 100-bed hospital is 12 miles distant. Approximately 65 medical doctors, including specalists, practice in the area. It is recognized that these hospital and medical services would have to be shared with the local populace.

Shielding.—Although the above facilities and services are not completely shielded from radiation hazards due to fallout (although the water supply could be so shielded without great change or expense), it is our understanding that the host institution at Repoint is developing extensive defense plans which, in the event of an emergency, would adequately meet our needs. We are now working with the Interagency Committee on Radiological Defense of Emergency Relocation Sites and the host institution is exploring means of shielding a cadre from radioactive fallout.

C. Have the necessary agency documents (not exercise documents) for emergency operations been prepositioned? If not, why not?

Necessary delegations of authority have been made to regional liaison representatives to make policy decisions on any problems in their geographical areas if they are cut off from higher authority. Delegations have also been made to the Commodity Stabilization Service commodity offices to protect and dispose of CCC-held stocks. These delegations, however, to be effective need to be clarified in relation to general orders and suborders on their implementation. Delegations of authority and prepositioning of control documents to other field offices have not been made pending the organizational alinement previously referred to. Delegations of authority contained in the Federal Register to the county offices of OFA, to be effective, must be implemented by internal instructions which will be issued as soon as the answers to corresponding organizational questions have been determined. OFA is making plans toward this end. To be fully effective the intent of these delegations and orders needs to be generally understood by food processors and distributors, and distributors of farm machinery and fertilizer.

For rural fire defense the necessary agency documents have been prepositioned. The only limitation is size of organization and adequacy of facilities and equipment needed at certain locations to meet national emergency conditions.

D. Have the necessary delegations of authority to the field been made to assure emergency operations under such attack conditions? If not, in what instance should additional delegations be made?

Necessary delegations of authority have been made to regional liaison representatives. Other delegations have been made to selected field offices for the disposition of Government-owned food stocks. Delegations to lower organizational levels will be made as soon as feasible after the national headquarters and related field organization structure has been determined.

For rural fire defense within the limits of the present delegation to the Department of Agriculture the necessary delegations of authority have been made to the field. (Such limitations, among others, concern the need for clarifying Federal-State relations, as is discussed in sec. 1, par. D above, and sec. II, par. G below.)

E. Were communications systems during OPAL 1958 adequate to meet your needs?

Communications during OPAL 1958 were adequate with exceptions noted below. We had anticipated that the volume of traffic would not put a strain on our communications capability because of the nature of the exercise and had made prior arrangements to exchange communications drill traffic. Even after superimposing drill traffic on top of exercise traffic no circuit congestion was noted except as indicated below. Originating traffic flowed smoothly with considerable idle circuit time.

Exceptions

1. Difficulty was experienced on July 14 and again on July 15 on the DELNET, which was found to be trouble in the terminal equipment and not in the circuits.

2. The OFA region 8 relocation site at Corvallis, Oreg., was without any kind of telecommunications for 2 days due to circuit trouble.

3. On July 16, our traffic was held in backlog at the GSA transfer due to insufficient circuit capacity at that point, caused principally by lengthy report messages from our field relocation sites.

F. Would the type and extent of communications presently provided be adequate in an emergency?

Type and extent of communications presently provided would be adequate in an emergency insofar as the terminal equipment is concerned. Communications capability expressed in terms of operational readiness (trained personnel and equipment in being) at the relocation site would meet our needs. However, a complete and realistic capability evaluation would involve an assessment of total communications, such as condition of carriers' circuits, switching centers, manpower, etc., and carriers' ability to restore service. Such an evaluation is not within the competence or responsibility of this agency.

A sufficient number of trained communications personnel are available, but constant retraining and drilling is necessary to maintain the communications team in a state of readiness.

(See also answer to sec. III D.)

G. Is there need for any additional authority to carry out your emergency operations? If so, recommend necessary authority.

For phase II of this exercise we noted the need for the additional authority (or in some cases clarification of existing authority) for OFA discussed above in section I F. Further study is recommended and planned by OFA regarding authorities needed for an actual emergency.

With respect to rural fire control (in addition to needs related to authorities cited in sec. I F above), it is recommended—

1. That delegation No. 2 to the Department of Agriculture should be changed to read as follows: "Plan a national program and, in cooperation with local, State, and Federal authorities, direct all local, State, and Federal governmental activities related to the prevention and control of fires caused by enemy attack in the rural areas of the United States." (See detailed justification in special report on rural fire control submitted under sec. III.)

2 That emergency contracting authority be vested in the agency responsible for rural fire defense.

3 Federal Register, volume 23, No. 1, Executive Order OPAL 58–4, section 3, should be expanded to insure a priority of weather information as is needed by the responsible agency for rural fire defense needs.

4. The committee membership for fuel (Ref. OPGA Order No. 2) should be expanded to include representation from the agency responsible as a claimant for fuel for mechanized fire-fighting operations.

With respect to the protection of livestock and crops against biological warfare, chemical warfare, radiation, and radioactive fallout, it is recommended that delegation No. 2 to the Department of Agriculture should be changed to read as follows:

"Plan a national program and direct Federal activities concerned with diagnosis, strengthening of defense barriers, and control or eradication of diseases, pests, or chemicals introduced as agents of biological or chemical warfare against animals, crops, or products thereof, and furnish technical guidance to Federal, State, and local authorities with reference thereto.

"Provide technical guidance to Federal, State, and local authorities covering the protection, treatment, and handling of livestock, crops, and supplies of food and feeds exposed to or affected by radioactivity.

"Plan a national program, direct Federal activities, and provide technical guidance in connection with protecting the processing and distribution of meats and food products thereof to assure their safety and wholesomeness and minimize the losses from biological warfare, chemical warfare, radioactivity, and other emergency hazards."

H. Were personnel security arrangements adequate? If not, what should be done?

Personnel security arrangements are considered adequate. Lists of cleared personnel are on hand at the relocation site for confirmation of security clearances. Also, considerable care is taken to be certain that personnel have proper degree of clearance in keeping with security classification of assigned duties.

SECTION III. RESOURCES

It is believed that the only questions of this section of the questionnaire applicable to OFA are III–D and III–G. The answer to III–D follows; however, as III–G is so comprehensive it has been made the subject of a separate report.

D. Immediately after the attack, at D-plus-14, D-plus-30, and D-plus-90, what were the requirements for telecommunications? Explain the ability to meet telecommunications requirements. Recommendations for improving capability to meet requirements.

Immediately following attack our greatest need for communications would be over the interagency communications system. Presidential orders, OORO directives, and target information, followed by damage assessment information, would take high precedence.

The ability to communicate with 11 OFA relocation sites between D-day and D-plus-14 to assess their operational capability would be extremely urgent. Following this period up to D-plus-90 would find a need for considerable communications with other agencies of Government and with the OFA field relocation sites. Preposition of authorities and action orders should minimize volume of traffic; notwithstanding, sectional, and national coordination of the responsibilities delegated to this agency would depend upon reliable communications.

We believe that communications capability in terms of operational readiness (trained personnel and equipment in being) at OFA relocation sites meet requirements, but we strongly urge that work go forward as rapidly as possible to shield the ICS and common carriers to reduce their vulnerability in a massive nuclear attack. In addition, we urge that if it is not already being done, plans be made to insure at least basic communications capability in and near damaged areas for the widest possible dissemination of information to the general public on such important survival topics as fallout, decontamination, food conservation, fire-fighting, biological and chemical warfare, etc.

SECTION IV. FINANCIAL AND ECONOMIC STABILIZATION

It is believed that question H is the only question of this section applicable to OFA as action to control food is presented at length in the special report on Opal, 1958 (attached). "Consumer goods" as used in question H is therefore not considered as including food for the purpose of answering this question.

H. How did you theoretically control the distribution of essential consumer goods during the first days after attack? What is your judgment as to the status of arrangements for emergency rationing?

The distribution of other essential consumer goods as are within the authority of the Opal Food Agency, namely, farm machinery and fertilizer, was controlled through OFA orders. The Opal Food Agency made recommendations to the appropriate Opal agency concerning other nonfood materials and equipment needed in food production, processing, and distribution, and rural fire defense.

SECTION V. DOMESTIC SECURITY

Although the Opal Food Agency is not responsible for domestic security in response to the OORO operational capability task force questionnaire of July 1, 1958:

1. We pointed out that "there is need for a general governmentwide policy and approach to providing necessary military guard or other security force at each such (relocation) site."

2. We recommended ODCM develop governmentwide policy implementation and instructions in this general area.

SECTION VI. INFORMATION

A. Under the assumed situation, what information would your office have proposed to release as being of immediate assistance to the general public? E. g., information on key emergency actions taken, instructions to the public, requests for public cooperation, etc.

Because of the damage to food stocks, production, processing, and distribution facilities, it is imperative that information on immediate postattack conditions be released to the public as soon as possible. We propose to release information on the following as soon as feasible:

1. Conservation of local food supplies with special emphasis on use of consumable perishables first.

2. The need to self-ration home supplies.

3. Possible effect of fallout on local food supplies and how to determine which foods are usable and which are not, and the time when contaminated stocks would be consumable.

4. Substitution of foods for those in short supply to achieve as balanced a diet as possible with available stocks.

5. Alternate methods of home preparation of foods to make full use of such food items as are available.

6. Explanation of the need for and the importance of observing food orders and use restrictions imposed by the Government.

7. Advice to farmers on supply of production requisites, the denial time for land use, and on the immediate and long-range production requirements, in total amounts, and of selected foods.

B. What capability did your office have for disseminating news and information broadly? Is the office an established contact point between Government and mass information media representatives? Could it serve in an emergency as a release point for Government news?

OFA's activities in release of general information were tailored to fit the provisions of annex 5, program X–14, Public Information Guide. Under the general plan established for the release of public information during Opal, 1958, OFA is not an established contact between government and mass information mediums representatives. Public mass medium facilities for release of public information on a national basis do not exist at our relocation site at this time. We would use our administrative communication system, but it would fall short of needs.

Because of the likelihood that communications between Government agencies will be disrupted, OFA will develop a plan in cooperation with other Federal and State agencies to disseminate information re food through all available media.

C. Given the damage assumptions for your area, what mass media of information (wire services, newspapers, radio, TV) had the capability to continue operations? Which of them had the greatest surviving capability?

Very limited public communications facilities exist in the area. Damage assessment people at the relocation center state that electric and power facilities would be available, but that because of the fallout pattern it might be from 14 to 90 days before people could move about in the immediate area of the relocation center. Two small radio stations and two small-circulation newspapers are located in the general area of the relocation center.

SECTION VII. TRAINING

A. What is your evaluation of the current exercise as a training mechanism? Is your organization capable of carrying out its functions in such an emergency?

The exercise for OPAL Food Agency was carried out in the following manner. The participating group at repoint was divided into the following major units (or seminars):

1. Supply-requirements review.
2. Review of standby plans and orders relating to distribution and procurement of food.
3. Review of plans for food production on farms and in processing plants.
4. Nonfood requisites and relation with other resource agencies.
5. Rural fire control.
6. Special fallout problems.

Each seminar studied the various delegations, orders, and authorities in light of the damage assessment reports and the assumptions of the exercise to determine the capabilities of meeting food requirements of the Nation and the action that should be taken to achieve this end. Information was exchanged and group recommendations were reviewed, approved, or modified by the Administrator and his executive staff.

This seminar arrangement provided a better mechanism for mobilization planning than operational units used in other alerts have provided. There was a better opportunity to exchange information and ideas, to determine the adequacy of or identify deficiencies in our mobilization plans, and to deal more with substantive operational planning than with specific details. This exercise afforded a very excellent training experience.

In general terms we believe our capabilities could meet our responsibilities in connection with food in an emergency, with the limitations previously mentioned, provided organizational uncertainties and interagency jurisdictions are clarified and assuming reasonable interagency support.

B. How many employees and executive reservists participated in phase I and phase II, OPAL 1958?

Approximately 13,000 employees participated in phase I and 353 employees (at repoint and field offices) participated in phase II, OPAL 1958. OFA is staffed with departmental employees and no executive reserve program is established at the present time.

C. What emphasis should be given OPAL 1959, 1960, and 1961?

The seminar approach was used to advantage in the 1958 exercise. The type of planned exercise and the status of organizational decisions concerning OFA will influence to a significant degree its use in future exercises. This approach (depending on these factors) might be useful in certain phases of an exercise combined with the use of an operational approach on other phases. The following suggestions have been made with respect to subsequent alert exercises.

1. Provide, through careful advance planning, for preoperation alert meetings of task force representing OORO agencies having responsibilities and nonfood requisites.
2. Eliminate, to as large an extent as possible, details which attempt to prove a particular situation, and deal more with substantive operational planning.
3. Establish exercises based on attacks at different times during the year to bring out different impacts on food and rural fire situations at different seasons of the year.
4. Include in damage assessment work on food and rural fire defense the important and significant effects of the attack upon supporting resources such as fuel, power, manpower, and equipment
5. Include problems dealing with biological and chemical warfare attacks and the effects of radiation and radioactive fallout on livestock and crops. Such problems would provide experience and information to the Department (or OFA) in dealing with these special weapons and their effects on the Nation's food supply.

SPECIAL REPORT ON OPAL 1958, BY OPAL FOOD AGENCY [1]

Operation Alert 1958

I. FOOD SITUATION

Analysis of prospective food supply situation up to D-plus-90 showed food supplies generally adequate to meet 2,200 calories per day requirement for the surviving population subject to the qualifications in section II A of the attached evaluation report submitted by the OPAL Food Agency. There were, of course, acute shortages in certain items on a national basis and in several areas of the country.

II. OBTAINING NEEDED DATA ON FOOD SUPPLY

Obtaining the data needed in connection with this supply-requirements analysis pointed up the need for establishing a standby system for reporting food supplies and food production, processing, and distribution facilities on a continuing basis. Following attack there were deficit and surplus areas, and it was essential to obtain accurate supply information on a county and State basis. This exercise proved that immediately after an attack, local OFA offices would have the major responsibility for assessing the food situation and taking local action within the framework of delegations to OFA.

A. Proposed preattack action re obtaining food information

A standby arrangement and procedure will be developed detailing methods by which Federal organizations at State and local levels would determine and report the food situation as it exists immediately after attack.

III. COMMODITY ANALYSIS

A. Conclusion

Based on the methods used in the analysis of damages resulting under OPAL 1958 assumptions (see limitations discussed in section II A of evaluation reports) the following overall commodity situations existed:

1. Yeast for bread was in serious short supply.
2. Cereal supplies were adequate for domestic and any foreseeable export needs but limiting factors were inadequate transportation, and milling and processing facilities.
3. Meats and fish were available nationally in at least normal quantities per capita, but distribution was badly distorted.
4. Poultry and egg supplies were below normal per capita.
5. Milk and milk products were in short supply. Fallout, particularly iodine isotopes, drastically limited the use of fluid milk for the first 60 days to about 20 percent of preattack levels. Under the assumption that iodine isotopes decay after about 60 days, it was theoretically possible to use milk for manufactured products to be available for consumption after that time.
6. Fruit and vegetable supplies for the period D-plus-1-to-D plus 90 were adequate; however, distribution to deficit areas was limited because of transportation, and containers were a prime limiting factor.
7. The sugar supply was critical and will continue so until imports can be reestablished and there is adequate transportation.
8. Fats and oils production would be adequate but there would be a lack of vegetable oil refining facilities.
9. Cotton supplies were adequate. (Facilities to process cotton linters might be a problem if linters are needed by remaining industry.)
10. Wool supplies were greatly reduced due to loss of stocks. There was severe destruction of wool processing facilities. It is doubtful if remaining facilities can process domestic production.

B. OPAL 1958 action taken on specific commodities, period to D-plus-90

1. It was necessary to channel supplies of canned and dry milk into shortage areas and to limit use of these and fluid milk to children and pregnant women.
2. With yeast and bread shortages it was necessary to use more raw or unprocessed cereal products such as whole and cracked wheat.

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[1] To provide comprehensive response to sec. III G of annex No. 6 to program memorandum X–14, dated May 29, 1958.

IV. FOOD CONTROL MEASURES

A. Conclusion

The food control measures anticipated the use and administration at county, State, and national levels of activities authorized by a series of food orders including (*a*) inventory freezes; and (*b*) an antihoarding order, but chiefly relying upon the use of; (*c*) requisition orders where necessary; (*d*) use and distribution orders; and (*e*) as national communications and administrative lines were restored set-aside orders to obtain needed supplies of scarce food for the military, shortage area or emergency uses, and foreign shipment along with; (*f*) allocation orders to control distribution as between different areas and claimants.

B. Action taken on food orders for purposes of Opal 1958

The food priorities order was withdrawn but is in readiness for future operations on a standby basis. (As a matter of general policy in case of an attack it is recognized that the use of an emergency food priority system might have to be resorted to, but we doubt that it would be effective under the conditions assumed under Opal 1958.)

C. Action taken and proposed on food orders for long-range planning

1. The food inventory freeze order was reviewed and certain questions raised on (*a*) the blanket exceptions to Government agencies and (*b*) the definition of inventory. (It is proposed to study these problems further and take appropriate action.)

2. The authority at National and State level under the basic distribution and use order was extended for the issuance of suborders at the county level.

3. The basic set-aside food order was amended to provide issuance of suborders at the national level only.

4. Suborders under the basic set-aside order will not be issued until the overall food supply-requirements picture has been clarified at the national level—probably not earlier than D-plus-90.

5. In order to conserve storable stocks, special emphasis will be placed on the immediate use of uncontaminated perishable foods.

V. FOOD-PRODUCTION MEASURES

A. Conclusion

The food-production measures would first center upon care of livestock and poultry, and conservation or harvest of current crops, with attention then shifting to future production.

B. Under Operation Alert assumptions

1. *Action taken on 1958 crops.*—As soon as feasible, a system of priority or other assistance to farmers in obtaining needed harvesting and storage requisites was recommended or established. Priorities for petroleum and machinery repair parts, as well as requisites for other food production, were placed in effect immediately to permit harvest and storage of storable crops. In cases where it was determined by local authorities with respect to perishable foods that they could not be used locally, canned, or otherwise processed and stored, or shipped to nearby areas for immediate consumption, these priorities did not apply and the crops were left unharvested to avoid the wastage of manpower, fuels, and other critical materials.

2. *Proposed action on 1959 crops.*—

(*a*) Priority assistance will be provided to permit the planting, cultivation, harvesting, transportation, processing, and storage of essential amounts of required food products. If it is determined that priority assistance cannot be granted or that sufficient requisites will not be available to cover the total food needs, selection of the most desirable crops or products will be made. Petroleum fuel will probably be the greatest limiting factor in production, and rationing for this item may have to be used as a mechanism to achieve the desired production of selected crops.

(*b*) Orders will be prepared (or recommended) and prepositioned in hands of local authorities, restricting use of labor, seed, petroleum, fertilizer, insecticides, and other scarce materials to lands which have been declared suitable (from contamination point of view) for maximum production of needed agricultural commodities.

C. Preattack planning

Federal and State employees need to be trained and the public informed concerning effects of radiological fallout on, and care and use of, food and feed products, livestock, soil, and water. (See subsequent sections in this report entitled "Special Fallout Problems Affecting the Food Area" and "Radiological Monitoring.")

VI. PROCESSING, DISTRIBUTION, AND STORAGE FACILITIES

A. Action taken Opal 1958

Every priority assistance was granted to the food processing, distribution, and storage facilities most urgently needed. The damage to food processing and storage facilities was extremely heavy.

B. Preattack planning

It is recommended that consideration be given to urging the dispersal of processing, distribution, and storage facilities and their relocation in rural or less heavily populated areas. After attack, consideration should also be given to withholding priority assistance unless facilities which are rebuilt are so located.

VII. FOOD PROCUREMENT

The operational effectiveness of the food procurement procedures, which have been developed on a standby basis, were not tested pending the developing of a field organization.

VIII. IMPORTANCE OF NONFOOD REQUISITES ON MEETING FOOD REQUIREMENTS

A. Conclusion

Meeting the food needs of the Nation's population on a survival basis will rank second in importance only to the physical protection of the country.

As a general policy, OFA will take all feasible measures in the fields of food production, processing, and distribution to reduce agricultural requirements for scarce supplies of nonfood materials and services.

Nevertheless, it must be recognized that production of food in this country is highly mechanized. Shortage of fuel for direct farm use, for example, would very severely reduce the production of field crops and livestock products. Likewise, shortages of electricity would seriously curtail food production. Transportation also must be provided to move agricultural products from the farm to the processor and through-distribution channels to the consumer. These factors plus other nonfood requisites are essential. In the event of a nuclear attack they must be provided if the civilian population is to be fed even on a survival basis, military needs met, and minimum aid supplied to our allies.

B. Preattack planning re manpower

It is recommended that consideration be given by the Manpower Agency to methods which will assure the availability of manpower to meet the needs of essential food production, processing, and distribution activities.

C. Proposed action re petroleum products

It is recommended that reconsideration be given to the procedure for allocation of petroleum supplies among essential users in view of its importance in meeting food needs. The Opal Food Agency should assume responsibility for determining needs for petroleum products for food production, processing, and distribution and request allocations for these needs. This should be the basis for rationing fuel to farmers, processors, and others in the food activity.

D. Proposed action re transportation

It is recommended that Opal Transport Agency orders be reconsidered so as to provide higher priority on transportation of food. The OFA should also have authority to dispose of perishable food cargoes that fail to reach destination.

E. Proposed action re food containers

It is recommended that the limited supply of food containers must be used in the preservation of the most essential foods. The OFA should assume responsibility for determining needs for these items, and these determinations should be the basis for distribution of limited stocks of containers.

F. Proposed action re farm machinery and food-processing equipment

It is recommended that the Opal Industrial Production Agency develop plans which will provide a supply of farm machinery and necessary repair parts which OFA determines is necessary. OFA will be responsible for distribution. The Opal Industrial Production Agency should assign priorities to the production of processing equipment in accordance with recommendations of the Opal Food Agency.

G. Proposed action re fertilizer

The Opal Food Agency is issuing suborders for the 1959 crop year, implementing the basic distribution and use order on fertilizer, directing remaining supplies to food products most urgently needed.

H. Proposed action re pesticides

It is recommended that the Opal Industrial Production Agency develop a program to assure the effective use and conservation of the limited supplies of pesticides, with full recognition of the importance of pesticides to food production. The OFA should assume responsibility for determining needs, and this determination should be the basis for the distribution.

I. Proposed action re electric power

It is recommended that the Opal Energy and Minerals Agency give food production the same priority status as food processing, storage, and distribution.

IX. SPECIAL FALLOUT PROBLEMS AFFECTING THE FOOD AREA

A. Conclusion

Special fallout problems in the food area involve (1) an evaluation of the denial times for various levels of radiation activity, (2) an evaluation of the significance of the various short-life and long-life radioactive isotopes contained in the fallout, and (3) the formulation of guidelines and recommendations for maximum protection and use of agricultural resources after consideration of each of these controlling factors. Denial time has been calculated for the various levels of fallout intensity.

The short-life radioisotopes cause the initial damage with high-level radiation intensity which dissipates fairly rapidly following the attack. Isotopes of iodine require special attention because of their contamination of milk and leafy vegetables and their destructive effect upon the vital thyroid gland, especially of children. Fortunately, the iodine isotopes virtually disappear by D plus 60.

The long-life isotopes, principally strontium 90, remain dangerous for many years, constituting a semipermanent contamination of the soil. Conclusions and recommendations must change as new formation is developed through research.

B. Preattack planning re fallout problems

1. The Department is continuing within available resources its direct research and its cooperation with the Atomic Energy Commission, the States, and others in research to improve the knowledge of the effects on agriculture of radioactive fallout, with special emphasis on the development of measures for avoiding or relieving such effects.

2. As research information is available from any source, such information will be evaluated in relationship to food supply and information disseminated in appropriate form to farmers, agricultural field representatives, processors, consumers, and to the States for preemergency planning to avoid or minimize radiation hazards from fallout.

X. ORGANIZATIONAL PLANS

A. Conclusion

An adequate organization to enable the food agency to discharge its responsibilities during an emergency will require direct delegations of authority from the national office through appropriate intermediate authorities to the local level. It will also require that each level be informed in advance of its authorities and responsibilities and that adequate instructions and training be given to those responsible at each level. Alternates must be designated and given power to take action in case the principals are unable to function.

Various segments of the Department of Agriculture (or OFA) maintain offices in every rural county in the Nation, at the State level and on a regional, area, or district basis.

B. Proposed action

A group has been designated to study the capabilities at each level and develop an organizational plan that will make maximum use of our available personnel. As soon as organizational structure and responsibilities are determined an organization will be prescribed delineating areas of responsibility, and making delegations that will enable operation under conditions assumed in Opal 1958. This plan contemplates direct line of command from national headquarters, through intermediate levels, to local levels. It will also provide that any level can operate independently in case communications are disrupted.

XI. INTERNAL INSTRUCTIONS

A. Conclusion

Operation Alert pointed up the necessity of prepositioning policies, plans, and standby orders pertaining to the food area in field offices for immediate implementation in the event of sudden attack.

B. Proposed action

OFA will, as soon as practicable after prescribing an organization in line with the determinations referred to above, issue detailed instructions to its field organization. Such instructions will include procedure for determining and reporting existing food stocks by counties, conservation, and management of food stocks at the local level, procurement of food for shipment to deficit areas, dissemination of survival information to rural people, priority, and manpower assistance to food producers, processors, and distributors, direction of agricultural production to meet future food needs, agricultural land rehabilitation, providing financial and technical assistance to promote agricultural production, and any other delegated and inherent duties and responsibilities.

XII. RADIOLOGICAL MONITORING

A. Conclusion

One of the most serious deficiencies revealed by the Operation Alert exercise was the lack of trained personnel and organizational coordination for effective radiological monitoring. On-the-ground knowledge of fallout conditions is imperative for agricultural and rural fire-control purposes. The farmers and fire-control crews must know the intensity of radiation to assure protection of men, food, and water supplies. As an example of the size of the job ahead, it is estimated that 45,000 supervisory personnel and instrument operators must be trained and equipped for rural fire defense alone. Other emergency agencies and departments are working in the same areas and have similar problems. Preattack plans are imperative to train personnel, coordinate monitoring in all areas (responsibility should be fixed and the organizational plan designed to integrate and interpret and disseminate such information on a continuing basis), and make provision for sufficient radiation survey equipment.

B. Preattack plans

It is recommended that—

1. Office of Defense and Civilian Mobilization—
   (*a*) Provide overall guidance and coordination in this area;
   (*b*) Expand the acquisition of equipment needed;
   (*c*) Intensify its training programs;
2. OFA conduct the operational phases within the area of its responsibilities to the extent necessary.

XIII. PUBLIC INFORMATION AND EDUCATION

A. Preattack

The general public should be informed as to the effect that a massive nuclear attack on the Nation would have on food supplies and resultant food availability and uses. An informed and warned public would make better use of food substitutes and adopt self-rationing practices on home food supplies. These and other emergency practices would be invoked automatically in the event of attack and the facilities for dissemination of mass information would

be limited and undependable immediately thereafter. Food manufacturers and processors should be informed of proposed control measures. Preattack information and education would insure prompt and timely execution of plans for action and, at the same time, not compete for meager informational facilities with other vital information not subject to preattack dissemination.

B. Postattack

A full explanation of and need for the effective management of our food supplies should be broadly disseminated to win consumer understanding of the need for restrictive measures and controls. Similarly, information should be given to food manufacturers and processors to obtain broadest compliance with Federal food orders and directives.

C. Proposed action

The USDA (or OFA) will assume primary responsibility for developing information in this area for dissemination through all available means.

XIV. FURTHER ACTION OFA PLANS ON BASIS OF THIS EXERCISE

The conclusions and proposed action contained in this report are limited to data available at Repoint and to the time available during phase II of Opal 1958 for consideration of these data. Changes in the conclusions or recommendations may be in order with more study and review.

It is the plan of USDA (or OFA) to review this report in detail, and in light of (1) such additional data as may be available, and (2) such actions as other agencies have taken or are planning, to recommend or take such action as appears to be in order to improve the capabilities of meeting our food requirements in the event of a national emergency.

SPECIAL REPORT ON RURAL FIRE DEFENSE[1]

Operation Alert, 1958

I. THE FIRE PROBLEM AND NEED FOR CENTRALIZED CONTROL

A. Background information

Virtually every bomb creates a free-burning wild fire which often results in burn damage much greater than the initial blast. Area burned in Opal 1958, was 143 percent larger than the blast and thermal acreage. Total burn covered more than 3 percent of the land area of the United States.

Wild fire behavior cannot be predicted precisely, principally because it is affected by many interrelated factors. Weather, topography, time of year, and kind and arrangement of forest and other fuels influence the rate of fire spread and the difficulty of bringing it under control. Conditions vary not only from county to county, and mile to mile, but even from acre to acre. Usually, the larger the fire the greater the control problem. As perimeter increases strong local drafts are created, the burn is more intense, fuels kindle more readily and spread is more rapid.

It is axiomatic in fire control that there be only one agency in complete charge. The responsibility of this agency must be carried out in cooperation with the Department of the Interior agencies, the States, and other protection agencies, utilizing their manpower and equipment whenever available.

Wild land fires are not restricted to boundaries of counties, States, or regions. There will be decisions of strategic importance as to priorities of use of manpower for fire suppression on highly important areas. This further points up the need for a single agency to be responsible for the suppression of rural fires.

The present delegation on rural fire defense issued by the President September 8, 1954, provides that the Secretary of Agriculture has the responsibility to: "Plan a national program, direct Federal activities, and provide technical

[1] To provide information inresponse to annex 6 to program memorandum X-14 in addition to that contained in the Food Agency's response to that memorandum.

guidance to States concerned with the prevention and control of fires caused by enemy attack in rural areas of the United States."

The delegation does not give a clear mandate for the actual direction of rural fire-control activities following enemy attack.

B. Proposed action No. 1—For preattack planning

It is recommended that this delegation to the Department of Agriculture be modified to read as follows: "Plan a national program in cooperation with local, State, and Federal agencies and direct all activities related to the prevention and control of fires caused by enemy attack in the rural areas of the United States."

C. Proposed action No. 2—Re operation alert, 1958, exercise documents.

Assign responsibility to a single agency for both the program aspects of fire control and claimancy for essential nonfood services, materials and facilities needed to carry out the fire-control effort.

II. EQUIPMENT AND MATERIAL REQUIREMENTS FOR RURAL FIRE DEFENSE

A. Background information

Damage assessment surveys indicate a substantial loss of mechanized equipment, fuel, and electric power in a nuclear attack. There will be heavy demand for automotive equipment, tractors, and communications for many operations in addition to fire control. Less power equipment, electric power, gasoline, and oils emphasize the need for handtools to fight fires, and battery radios and electric generators for emergency communication. These would at least enable fire control operations to proceed.

Opal, 1958, illustrated that much equipment and manpower were in target areas and made unavailable by fallout or direct loss.

B. Proposed action—Preattack (subject to further detailed study and satisfactory funding arrangements)

1. Include in Federal and State rural fire-defense plans estimates of types and amounts of equipment necessary to meet requirements for items 2 and 3 below.

2. Stockpile, as soon as feasible, sufficient fire-fighting handtools at dispersal points away from target areas to substitute for immobilized power equipment.

3. Equip fire control agencies with battery-powered skeleton radio communications systems and electric generators for emergency use.

III. OPERATIONAL CAPABILITY

The Opal, 1958, exercise demonstrated that most of the rural fire defense organizational units are not fully capable of carrying out their functions in a nuclear attack. Fire organizations in many areas are not adequate to meet normal peacetime conditions. There are not clear delegations of authority, adequate radiological monitoring services, equipment and manpower to meet emergency situations. The relationship of rural fire defense to ODCM has not been fully defined. Incomplete rural fire-defense plans hampered effective functioning of the organization.

IV. RELATED FIRE DEFENSE NEEDS

A. Importance of other factors in meeting rural fire defense needs

The same needs discussed in the Special Report on Opal, 1958, by Opal Food Agency attached apply equally to the rural fire defense plans. These include:

1. More adequate monitoring.
2. Training of employees in their emergency responsibilities.
3. Informing the public of hazards and self-help aids.
4. Manpower, fuel, transportation, materials, and facilities priorities to cope with large-scale rural fires.

EXHIBIT 6

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 26, 1958.

MEMORANDUM No. 1427

LIAISON WITH AND COORDINATION OF DEFENSE AND CIVILIAN MOBILIZATION ACTIVITIES

By Secretary's memoranda Nos. 1346 and 1350 the Food and Materials Requirements Division of the Commodity Stabilization Service and Mr. Theodore S. Gold, Assistant to the Under Secretary, were assigned responsibility, respectively, for general liaison between the Department of Agriculture and the Office of Defense Mobilization and the Federal Civil Defense Administration.

Reorganization Plan No. 1 of 1958 consolidated the Office of Defense Mobilization and the Federal Civil Defense Administration, and established in the Executive Office of the President the Office of Defense and Civilian Mobilization which will perform the functions heretofore assigned to ODM and FCDA.

In view of this action it is appropriate and desirable to centralize in the Department of Agriculture the liaison responsibilities heretofore exercised in the Food and Materials Requirements Division and by Mr. Gold. Effective immediately, therefore, the Food and Materials Requirements Division of CSS will have the responsibility for central liaison with the Office of Defense and Civilian Mobilization, and in the exercise of this responsibility will take such steps as may be necessary to assure the necessary interchange of information and appropriate coordination of the defense planning and mobilization activities in the Department of Agriculture.

Overall policy and operational determinations relating to these activities will continue to be the responsibility of the Office of the Secretary under the direction of Under Secretary True D. Morse who will serve as the Department's representative on the Defense and Civilian Mobilization Board.

Those parts of Secretary's memoranda Nos. 1346, 1350, and 1398, which are inconsistent herewith, are hereby superseded. It is expected that the Office of Defense and Civilian Mobilization will in the near future revise and bring up to date delegations previously made to the Department of Agriculture by ODM and FCDA. When this is done the Secretary's memoranda mentioned above, together with others dealing with our defense planning and mobilization activities, will be revised accordingly.

EZRA TAFT BENSON, *Secretary.*

DEPARTMENT OF LABOR

DEPARTMENT OF LABOR,
OFFICE OF THE SECRETARY,
Washington, November 14, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Washington, D. C.
(Attention: Mr. Harold J. Warren, Clerk and Counsel.)

DEAR SENATOR ROBERTSON: The annual report requested in your letter of August 14, 1958, is enclosed. It constitutes a brief, factual summary of the major mobilization activities carried out by the Department of Labor in the past year.

The report follows an outline different from the one suggested in your letter; however, any points applicable to this Department's activities have been covered.

If further information would be useful to your committee, please call upon us.

Yours sincerely,

JAMES J. O'CONNELL,
Acting Secretary of Labor.

PART 1. GENERAL INFORMATION

AUTHORITY

Mobilization activities in the Department of Labor are carried out under a variety of authorities:

1. Executive Order 10480, dated August 14, 1953.
2. Order I–10 of the Director of Defense Mobilization, published in the Federal Register, May 26, 1954.
3. Delegation No. 2 of the Federal Civil Defense Administration, approved September 8, 1954.

The delegations covered in items 2 and 3 above, as well as related responsibilities stipulated in the Department's own basic legislation and in Executive Order 10480, are currently being drawn together into a single delegation instrument by the Office of Civil and Defense Mobilization. This new statement may be issued in the near future in the form of a Presidential Executive Order, superseding all previous delegations.

BASIC MOBILIZATION RESPONSIBILITIES OF THE DEPARTMENT

Appropriate staff members in the Department of Labor have worked closely with the Office of Civil and Defense Mobilization in drafting the new order. The present (draft) version of the document calls upon the Department of Labor to:

1. Identify and formulate plans, programs and policies needed to assure physical protection, expansion, training, and distribution of the labor force.
2. Develop appropriate economic measures to assure stability of the labor force including worker incentives, reemployment rights, income maintenance and wage and salary stabilization; and, in respect to authorized civil defense workers, plans for wage and salary compensation and for death and disability benefits.
3. Develop plans, programs and procedures for a comprehensive system of research, reporting, analysis and economic-advisory services during mobilization or emergency periods, including the provision of appropriate manpower information for use of other agencies and the review of data and programs affecting manpower developed by other agencies.
4. Develop organization plans and necessary administrative methods for carrying out mobilization and civil defense manpower programs during the emergency.
5. Develop measures for maintaining effective labor-management relations during an emergency.

The materials covered in part II of this report have been grouped under the five headings set forth above.

FRAMEWORK FOR EMERGENCY MANPOWER PLANNING

Planning activities pursued during the year took account of the two overall plans for mobilization developed by the Office of Civil and Defense Mobilization: One which assumes general mobilization without an attack on the continental United States, but with increasing threats of attack; and another which assumes massive nuclear attack on the United States, its Territories, possessions, and bases overseas, and on is allies.

The two sets of assumptions call for different kinds of program measures and sometimes require different kinds of implementing actions. Proposals for meeting the Nation's requirements under either set of assumptions were reviewed in relationship to the emergency programs of other agencies which would be called upon to meet the food, housing, transport, fuel, materials, production, and telecommunications requirements of the country.

Full coordination of civilian and military manpower measures must also be assured. Much of the planning work, therefore, was undertaken on an interagency basis. Necessary interdepartmental coordination was brought about in part through the Department's regular participation in the Defense Mobilization Board and the Civil Defense Coordinating Board (both of which have recently been merged into the new Civil and Defense Mobilization Board), and through

its participation in the interagency Manpower Policy Committee. Aspects of manpower planning which relate specifically to such specialized fields as scientists, engineers, and related groups have been taken up through the interagency Committee on Specialized Personnel.

Major policy proposals developed in the course of such planning work have, at regular intervals, been brought before the National Labor-Management Manpower Policy Committee. This committee is cochaired by the Assistant Secretary of Labor for Employment and Manpower and by the OCDM Assistant Director for Manpower.

DEVELOPMENT OF FIELD COMPETENCE

The Department of Labor, during the year, has taken a number of steps designed to increase the understanding of its field offices in all major matters related to emergency manpower administration and to the kind of operating self-sufficiency which would be required to carry out essential missions if field offices should be cut off from the national headquarters.

The Department participated in an "out-stationed" meeting of the interagency Manpower Policy Committee in Dallas, Tex. The purpose of the conference was to review with field officials of the several agencies which carry emergency manpower operating responsibilities the basic documents which have been drafted as operating guides to govern manpower operations in a mobilization or postattack period. The meeting, held last December, included ranking officials (both headquarters and field) of the Department of Labor, Department of Defense, Federal Civil Defense Administration, Office of Defense Mobilization, Selective Service System, Department of Health, Education, and Welfare, Department of Agriculture, United States Civil Service Commission and Department of Commerce.

The field officials enumerated several matters in which considerable further work will need to be done:

1. Relaxation of security classifications assigned to basic mobilization documents, so that they may be made available to State and local officials concerned with preparedness planning.
2. Clarification of organizational relationships in the mobilization field, including lines of authority and channels of communication.
3. Improvement of financing arrangements for mobilization activities of the several agencies involved.
4. Clarification of mechanics for implementing manpower policies and programs.
5. Development of more detailed plans governing the use of foreign nationals in a postattack situation.
6. Development of improved systems for allocating manpower among a multiplicity of claimants who will make competing demands upon a single manpower pool.

Action on some of these proposals was initiated on an interagency basis in connection with the overall planning for Operation Alert 1958; other problem areas became part of the exercise itself. Necessary interagency followup work will be incorporated into the manpower planning program for the coming year.

During Operation Alert 1958, the Department of Labor issued to field offices a number of exercise problems which called upon the regional manpower directors and other participating staff to review the adequacy of existing policy provisions as they would apply to different kinds of labor market problems emerging in areas suffering different intensities of attack. The regional directors have been asked to indicate any revisions which would help field offices meet their responsibilities more effectively.

CONTINUITY OF GOVERNMENT

In preparation for Operation Alert 1958, the Department of Labor carefully reviewed all emergency operating assignments made to it, appraising the feasibility of each program responsibility in the light of postattack assumptions governing the exercise. The analysis disclosed a number of program areas which would clearly be inoperable during the initial phases of recovery following an attack of the proportions assumed for this year's alert. In this fields, primary attention was directed to the identification of program actions which should be planned for later periods of time.

The exercise disclosed a need for greater delegation to the field of decision-making authority. Plans for the coming year will include provision for necessary staff work and the development of supporting documents.

The Department of Labor continued to provide regular representation to the OCDM interagency Facilities Protection Board, and participated in the review of proposed standards to govern the physical security of industrial and governmental facilities.

EXECUTIVE RESERVE PROGRAM

The National defense executive reserve program, established pursuant to the 1955 amendments to the Defense Production Act, provides a valuable means of assuring a qualified and trained corps of executive personnel to help in the direction of emergency operations. The training of executive reservists has been carried out principally by providing for their participation in the annual readiness exercises known as Operation Alert. During the past year, the Department of Labor appointed three additional reservists and provided a brief orientation training program for them. All three participated in Operation Alert 1958.

PART 2. SPECIFIC PROGRAMS

A. Identification and formulation of plans, programs, and policies needed to assure physical protection, expansion, training, and distribution of the labor force.

1. "DEFENSE READINESS HANDBOOK"

A revision of this handbook was undertaken in collaboration with selected representatives of the State employment security agencies. The handbook establishes preliminary guidelines covering both administrative and program matters involved in carrying out the numerous responsibilities which the manpower agency would be expected to perform following an enemy attack. It is directed primarily to the immediate postattack or survival period rather than to the longer periods required for restoration and rehabilitation purposes. It was prepared on the assumption that after an attack most decisionmaking and operating actions must be carried out at the local level. In the manpower field, the local employment security offices would carry these responsibilities. Primary emphasis in the handbook is placed upon the development of working relationships with civil defense organizations in the field.

A new appendix to the handbook has been added—a Department of Labor paper entitled "The Effect of Radiation Hazards on Manpower Operations." This paper reflects the most commonly accepted principles of the effects of radioactive fallout and other radiation hazards on the population, and describes their impact on manpower operations. This information is expected to prove helpful to State agencies in planning for the recruitment and allocation of workers following a nuclear attack.

2. ESSENTIAL ACTIVITIES AND CRITICAL OCCUPATIONS

In an emergency, certain skills not commonly found in peacetime would become critically important. Radiological monitors provide a good illustration. Such skills require extended training time and must be identified as basic for planning training programs.

The task of identifying these skills and occupations was begun some time ago by an Interagency Advisory Committee on Essential Activities and Critical Occupations. The committee is chaired by this Department and made up of representatives from the Departments of Agriculture, Commerce, Defense, Interior, and the Selective Service System. After continuing study and review, the committee has developed a list of occupational titles, codes, and definitions for the major civil defense services.

Thirty-three activities are now on the list, and additions are being made as further study justifies. The Department's Technical Committee on Critical Occupations is also continuing its industry-by-industry studies to insure that the mobilization list of critical occupations is geared to our changing technology. Several occupational series in the Federal Government are being studied. The list of essential activities, together with the list of critical occupations, will provide guidelines for the equitable distribution of needed manpower between the military services and the civilian economy.

3. STATE SURVIVAL PLANNING

Review by the Department of the "manpower annexes" of State civil defense preliminary operational survival plans is continuing. The reviews confirm the

need to clarify survival project groups' understanding of emergency security objectives, programs, and operations. Wider distribution to these groups of the Defense Readiness Handbook is being planned.

4. STUDIES ON IN-MIGRATION OF DEFENSE WORKERS

State employment security agency surveys of defense worker in-migration needed to staff 58 defense plants in 7 States were recently evaluated under provisions of Public Law 815, governing the extension of Federal assistance to schools in federally impacted areas. Reports prepared for transmittal to the Department of Health, Education, and Welfare indicated that substantial in-migration of defense workers occurred in 35 of the areas surveyed.

5. OCDM TASK FORCE ON HEALTH MANPOWER

The health manpower problem would probably far outshadow all others in an attack emergency. Although planning responsibilities in this field rest principally with the Health Resources Office in OCDM and with the Department of Health, Education, and Welfare, nonetheless, the Department of Labor has a contribution to make in planning, and has primary responsibility for the control of operations in this, as in other, civilian manpower areas.

In an emergency, this responsibility would be one of getting advice and policy direction from the health groups and using the Department's field facilities for carrying out the necessary action.

For these reasons, the Department has assigned one representative to work with the task force.

B. Development of appropriate economic measures to assure stability of the labor force, including worker incentives, reemployment rights, income maintenance and wage and salary stabilization; and, in respect to authorized civil-defense workers, plans for wage and salary compensation and for death and disability benefits.

1. WAGE PLAN FOR AUTHORIZED CIVIL DEFENSE WORKERS

A plan was prepared under specific delegation from FCDA on the assumption that, for the period of initial chaos in and around attacked areas, no preplanned income programs would be operating—the provision of physical necessities on a communal basis would be the rule and this is a problem not assigned to this Department. Our concern, rather, is with:

(*a*) The type of employment relationship and wage system to be set up for evacuees and others engaged in "long pull" rehabilitation work after the chaos and initial survival needs have been brought under control.

(*b*) The wage assurances that can be held out to workers brought from undamaged areas to work in damaged areas. Such assurances are essential elements in manpower recruitment plans.

With these considerations in mind, a paper was prepared outlining a policy for the payment of wage and salary compensation to authorized civil-defense workers. This paper was sent to FCDA but has not yet been given final clearance.

Information useful in civil-defense wage planning activities and for actual use in an emergency is being maintained at departmental regional offices on a current basis. This information includes wage-rate schedules and related materials for Department of Defense and Veterans' Administration field facilities as well as industrial data useful for establishing wage-rate schedules.

2. DEATH AND DISABILITY BENEFITS

A plan to provide death and disability benefits for authorized civil-defense workers and draft legislation necessary to effectuate the plan have been prepared. This legislation defines authorized civil-defense workers (as used in the FCDA delegation), and extends to them the benefits of the Federal Employees Compensation Act on a modified basis. FCDA has approved the plan but has recommended one change which will require clarification.

With the completion of this plan and draft legislation, the Department has discharged its immediate responsibility under the delegation. However, in view of the limited segments of the civilian population which would be covered by this legislation, the Department is giving consideration to a proposal for broadening this base of coverage.

In the matter of death and disability benefits during peacetime, the Department has undertaken to review the 38 State laws which provide some type of coverage for these workers. These laws, for the most part, furnish inadequate protection. The digest, when completed, should be valuable to those States which are either contemplating coverage for the first time or wish to improve their present coverage.

3. REEMPLOYMENT RIGHTS

Drafts have been completed of a program for the protection of reemployment and other job rights of civil-defense workers and workers transferring to more essential jobs during an emergency. These drafts, incorporating changes recommended by the Department's Labor Advisory Committee on Civil Defense, were issued during Operation Alert 1957, and underwent some revision during Operation Alert 1958.

4. WAGE AND SALARY STABILIZATION

The Department is studying the question of wage and salary stabilization to carry out its delegated responsibilities.

A representative of this Department has consulted with representatives of the Department of the Army, Department of the Navy, the Office of Civil and Defense Mobilization, and the United States Civil Service Commission to discuss the need for and feasibility of a separate plan and delegation to the Civil Service Commission covering wage and salary stabilization for all Federal employees (blue collar as well as classified) during an emergency. The Commission is seeking a permanent delegation to administer wage-stabilization measures for all Federal employees.

5. FEDERAL EMERGENCY UNEMPLOYMENT-PAYMENTS PROGRAM

A tentative Federal program is being developed to provide assistance to members of the labor force during periods of idleness due to enemy action or under full mobilization conditions. Questions which must be explored before the program gets past the tentative stage include the desirability of dependents' allowances, the application of disqualifications, the applicability of the program to international-claimant situations (Canada and Mexico), and the question of Federal operation where a State cannot or will not install the program. Problems will need to be worked out involving coordination at the National and State levels with welfare agencies and the railroad retirement unemployment insurance system, and procedures and criteria must be developed governing the State operation of the regular unemployment isurance program on an emergency basis pending the installation of the Federal emergency unemployment-payments program plan.

C. Development of plans, programs, and procedures for a comprehensive system of research, reporting, analysis, and economy-advisory services during mobilization or emergency periods, including the provision of appropriate manpower information for use of other agencies and the review of data and programs affecting manpower developed by other agencies.

1. STATISTICAL DATA FOR THE NATIONAL DAMAGE ASSESSMENT CENTER

The Department of Labor has maintained working relationships with the National Damage Assessment Center group on manpower aspects of preattack and postattack mobilization and civil defense planning.

The Department prepared statistical materials including (*a*) employment data for major divisions of industry and 25 occupational groups; and (*b*) employment statistics for 100 industrial classifications for approximately 100 labor market areas and 40 States. These data were processed by the National Damage Assessment Center to show estimated casualties and survivors by injury and degree of radiation exposure, and were used in Operation Alert 1958.

The Department also assisted the National Defense Assessment Center in the development of up-dated (1957) population figures for the use of all agencies, in order to eliminate the confusion of past exercises when other agencies updated the information on different bases.

A series of regional damage assessment memorandums, including training materials and describing various techniques on damage assessment work, was initiated to inform the field organization of the responsibility of the Bureau of Labor Statistics in this area. It is contemplated that in all regions the Regional Director of the Bureau of Labor Statistics will be prepared to advise the Regional Mobilization Coordinator on damage assessment techniques.

2. MANPOWER SUPPLY AND REQUIREMENTS

Following Operation Alert 1958, a discussion paper was prepared on manpower supply and requirements for interagency use at a postexercise evaluation meeting. This paper commented on the preliminary way in which feasibility testing had been carried out during Operation Alert 1958, and explained data adjustment and manpower allocation assumptions used during the exercise.

3. STOCKPILING OF REFERENCE MATERIALS

The latest editions of census material and the National Statistical Abstract were deposited at the Department's national relocation site for the purpose of keeping records as current as possible. Manpower data prepared for Operation Alert 1958 were left at the site.

4. GOVERNMENT PROCUREMENT CONTRACTS

Second quarter procurement data reflect the greatly increased extent to which preference was given in awarding contracts to firms in areas of substantial labor surplus by the Department of Defense, the General Services Administration, and other Government procurement agencies. In that quarter, 412 awards of $10,000 or more, totaling $33.9 million, were placed in labor surplus areas or industries as a result of set-aside or tie-bid preference procedures under Defense Manpower Policy No. 4. Of this number, 255 were awards of $25,000 or more, totaling $31.4 million, as compared with only 17 such awards, involving $1.8 million, in the preceding quarter. (Data on preference awards under $25,000 are not available for the earlier quarter.) The total dollar value of awards in labor surplus areas—with or without preference—increased from about $1.1 billion in the January–March quarter to $2.5 billion in the April–June quarter, reflecting both the overall increase in defense procurement activity in the second quarter and the increase in the number of labor surplus areas during this period.

5. DIRECTORY OF IMPORTANT LABOR MARKET AREAS

A consolidated supplement to the fourth edition of the Directory of Important Labor Market Areas has been released. This supplement covers all areas officially classified under the Bureau of Employment Security's area classification program for the 4-year period since the release of the original directory in July 1954. The supplement, for the first time, also contains a separate county index listing all counties or parts of counties included in any area officially classified since July 1951.

D. Development of organization plans and necessary administrative methods for carrying out mobilization and civil defense manpower programs during the emegency.

1. SECRETARY'S GENERAL ORDER NO. 63

In anticipation of the merger of FCDA and ODM, a major revision of the Secretary of Labor's General Order No. 63 was undertaken. This order originally outlined the Department of Labor's civil defense and mobilization planning responsibilities in terms of separate FCDA and ODM delegations. As revised, the order combines these responsibilities with the Department's responsibilities under its own legislative authority; groups them into five major functional categories; and clearly delineates the specific activities to be performed in each field by the appropriate Assistant Secretaries, Bureau Directors and office heads. Another significant change in the order puts responsibility for all mobilization and civil defense planning fuctions (including wage adminstraton) under the Office of Manpower Administration and names the Under Secretary as Administrator.

2. EMERGENCY ORGANIZATION

Consistent with the revision of General Order No. 63, relating to planning responsibilities, a document was prepared for use in Operation Alert 1958 which establishes an emergency manpower operating structure and organization, and assigns emergency responsibilities within this framework.

E. Development of measures for maintaining effective labor-management relations during an emergency.

Plans are underway to develop recommended measures for the maintenance of effective labor-management relations during an emergency. The proposed measures will be developed in consultation with the Department of Commerce, Department of Defense, the National Labor Relations Board, the Federal Mediation and Conciliation Service, and the National Mediation Board.

FEDERAL RESERVE SYSTEM

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM,
OFFICE OF THE VICE CHAIRMAN,
Washington, September 12, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production, Congress of the United States, Washington, D. C.

(Attention: Mr. Harold J. Warren, Clerk and Counsel.)

DEAR SENATOR ROBERTSON: In response to your letter of August 14, 1958, attached is a factual summary covering mobilization activities of the Board of Governors for the past year.

The summary covers two programs—the V-loan program, which is the only program carried out by the Board under authority of the Defense Production Act, and a program related to the preparedness of commercial banks being carried out under the provisions of Defense Mobilization Order I–20.

During the year, the Board of Governors and the Federal Reserve banks have continued their preparedness programs, and have continued the study of measures to be taken in the monetary and credit field in the event of an emergency.

Sincerely yours,

C. CANBY BALDERSTON,
Vice Chairman.

GUARANTEED LOAN PROGRAM

1. Mobilization programs conducted by your office, including the V-loan program conducted under the authority of the Defense Production Act as amended and the implementing Executive orders

The Federal Reserve banks, under regulations of the Board of Governors, act as fiscal agents of the United States in connection with the V-loan program for Government guarantees of defense production loans, and the Board of Governors, after consultation with the guaranteeing agencies, prescribes fees, rates, and procedures to be utilized in connection with such guaranties.

2. The authority from which your office derives its powers for such programs

The present V-loan program of Government guaranties of loans to finance defense production was inaugurated under authority of the provisions of section 301 of the Defense Production Act of 1950, approved September 8, 1950, and the President's Executive Order 10161, dated September 9, 1950, subsequently superseded by Executive Order 10480, dated August 14, 1953. Under the law, as amended by the Defense Production Act Amendments of 1958, authority for the program, unless further extended, will terminate on June 30, 1960.

3. A summary of each program

Pursuant to the law and Executive orders of the President, certain designated procurement agencies of the Government are authorized to guarantee loans made by private financing institutions to finance contractors, subcontractors, and others engaged in the performance of Government defense contracts for the purpose of expediting production and deliveries or services for the national defense. By an amendment made by the Defense Production Act Amendments of 1953 guaranties may also be issued with respect to loans made to finance contractors, subcontractors, or other persons in connection with or in contemplation of the termination of their defense contracts.

At the outset of the program the designated guaranteeing agencies were the Departments of the Army, Navy, Air Force, Commerce, Interior and Agriculture, and the General Services Administration. In 1951 the Atomic Energy Commission and Defense Materials Procurement Agency were also designated as guaranteeing agencies. By Executive Order 10480 of August 14, 1953, the Defense Materials Procurement Agency was abolished and its functions transferred to the General Services Administration.

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On July 31, 1958, guaranty agreements outstanding totaled $50,436,000. Of this amount, approximately 75 percent on the average was guaranteed by the Government. Under these guaranty agreements in force on July 31, loans outstanding amounted to $306,136,000 and there was available to borrowers an additional $194,300,000.

For the past several years the amount of outstanding guaranty agreements has remained rather constant indicating that the new guaranties authorized about equaled in amount those terminated each year. The guaranty agreements outstanding by the various agencies participating in the program follows:

Department of the Army	$29,146,000
Department of the Navy	186,443,000
Department of the Air Force	231,162,000
General Services Administration	48,264,000
Atomic Energy Commission	5,422,000

The net guaranty fees and interest on purchased loans collected by the guaranteeing agencies after deducting established losses, administrative costs and the expenses of the Federal Reserve banks as fiscal agents as of July 31, 1958, follows:

Department of the Army	$5,185,000
Department of the Navy	8,767,000
Department of the Air Force	11,380,000
General Services Administration	4,500,000
Atomic Energy Commission	450,000

No loans have been purchased by the Atomic Energy Commission. The Department of the Army has purchased 30 loans aggregating $15,731,000. Liquidation on these loans has amounted to $12,831,000. Losses charged off have amounted to $176,000. The Department of the Navy has purchased 18 loans aggregating $26,957,000. Liquidation on these loans has amounted to $26,746,000 and losses charged off have amounted to $3,000. The Department of the Air Force has purchased 3 loans aggregating $4,330,000. The liquidation on these loans has amounted to $1,846,000 and no losses have been established. The General Services Administration has purchased 1 loan in the amount of $270,000. There has been no liquidation on this loan and no loss has been established.

There has existed since the inauguration of the V-loan program complete cooperation and understanding between the guaranteeing agencies, the staff of the Board of Governors and the Federal Reserve banks. Any differences that have arisen have been promptly settled and the primary purpose in the minds of all connected with the program has been to facilitate the financing of defense contractors as provided in section 301 of the Defense Production Act of 1950 as amended, and the implementing Executive orders.

4. A statement on the effectiveness of each program

5. A statement on the current need for the programs

6. A summary of the programs as related to small business

The guaranteed loan program was successful and fulfilled a useful purpose during World War II and has been effective during the present rearmament period. It provides a mechanism whereby defense contractors and subcontractors, particularly small-business concerns, can arrange to borrow the funds necessary to finance their defense production through their local banks by means of Government guaranteed loans rather than through the advance of Government funds or direct Government loans.

From the beginning of the program in September 1950 through July 31, 1958, 1,523 loans totaling $3,033 million were authorized by the procurement agencies which may guarantee such loans under the Defense Production Act of 1950, as amended.

There was disbursed during the last 12 months since July 31, 1957, approximately $707,200,000 on outstanding V-loans, most of which are revolving credits.

The large amount of defense work financed through the medium of V-loans can be realized when you consider that the average ratio of the dollar value of contracts held by borrowers to the amount of money borrowed under the V-loan program to finance such contracts has been about 6 to 1.

The following tabulation shows the number and amount of guaranteed loans authorized at the end of each month in the period August 1957 through July 1958.

	Guaranteed loans authorized to date			Guaranteed loans authorized to date	
	Number	Amount (in thousands of dollars)		Number	Amount (in thousands of dollars)
1957—Aug. 31	1,497	$2,879,682	1958—Feb. 28	1,511	$2,934,880
Sept. 30	1,498	2,881,972	Mar. 31	1,512	2,936,430
Oct. 31	1,498	2,887,958	Apr. 30	1,514	2,936,900
Nov 30	1,500	2,906,485	May 31	1,516	2,952,250
Dec. 31	1,503	2,911,583	June 30	1,522	3,029,459
1958—Jan. 31	1,506	2,922,933	July 31	1,523	3,033,009

Eighteen percent of the number and approximately 1 percent of the amount of loans authorized consisted of loans under $100,000 while 56 percent of the number and 6 percent of the amount were under $500,000.

Eleven percent of the number and 1 percent of the amount of loans authorized were to borrowers having assets of under $100,000; approximately 42 percent of the number and 8 percent of the amounts were to borrowers having assets of under $500,000; 57 percent of the number and 12 percent of the amount were to borrowers having assets of under $1 million.

Approximately 73 percent of the number and 19 percent of the amount of loans authorized were to borrowers having less than 500 employees, including employees of affiliated concerns under common ownership or control. Approximately 75 percent of the number and 23 percent of the amount of loans authorized were to borrowers individually having less than 500 employees.

The following tabulation shows a breakdown of guaranteed loans authorized as of July 31, 1958, by size of loan:

Percentage distribution of V-loans authorized through July 31, 1958, by size of loan

Size of loan	Percentage of guaranteed loans authorized		Cumulative percentage distributions	
	Number	Amount	Number	Amount
Under $50,000	7.3	0.1	7.3	0.1
$50,000 to $99,999	10.4	.5	17.7	.6
$100,000 to $249,999	19.6	1.9	37.3	2.5
$250,000 to $499,999	18.6	3.8	55.9	6.3
$500,000 to $999,999	15.6	6.1	71.5	12.4
$1,000,000 to $4,999,999	22.2	28.0	93.7	40.4
$5,000,000 to $9,999,999	3.1	12.3	96.8	52.7
$10,000,000 and over	3.2	47.3	100.0	100.0

Percentage distribution of the guaranteed loans authorized from the beginning of the program to the end of July 1958, is shown below, classified by number of employees of the borrower.

Percentage distribution of V-loans authorized through July 31, 1958, by number of employees of borrower

NUMBER OF EMPLOYEES OF BORROWER, INCLUDING AFFILIATED CONCERNS UNDER COMMON OWNERSHIP OR CONTROL

Number of employees	Percentage of guaranteed loans authorized		Cumulative percentage distributions	
	Number	Amount	Number	Amount
Under 25	8.1	0.6	8.1	0.6
25 to 49	10.7	.8	18.8	1.4
50 to 74	9.0	1.2	27.8	2.6
75 to 99	6.8	1.2	34.6	3.8
100 to 149	9.5	1.9	44.1	5.7
150 to 249	13.1	4.3	57.2	10.0
250 to 499	15.3	8.9	72.5	18.9
500 to 999	11.0	10.8	83.5	29.7
1,000 to 2,499	7.2	14.4	90.7	44.1
2,500 and over	5.6	53.5	96.3	97.6
Not available	3.7	2.4	100.0	100.0

NUMBER OF EMPLOYEES OF BORROWER ONLY (NOT INCLUDING AFFILIATED CONCERNS UNDER COMMON OWNERSHIP OR CONTROL)

Under 25	9.0	0.9	9.0	0.9
25 to 49	11.3	1.2	20.3	2.1
50 to 74	9.8	1.3	30.1	3.4
75 to 99	7.0	1.2	37.1	4.6
100 to 149	9.1	1.9	46.2	6.5
150 to 249	13.5	6.1	59.7	12.6
250 to 499	15.3	9.9	75.0	22.5
500 to 999	10.7	11.6	85.7	34.1
1,000 to 2,499	6.1	13.9	91.8	48.0
2,500 and over	4.4	42.6	96.2	90.6
Not available	3.8	9.4	100.0	100.0

7. *Major problems which now confront your office in carrying out mobilization programs, including the V-loan program*

None.

8. *Changes in mobilization planning and readiness measures to meet future emergencies, including the V-loan program*

The Federal Reserve banks have plans to conduct the essential operations of the banks from relocation offices in the event of an emergency. The Reserve banks plan to continue to perform such fiscal agency functions under the V-loan program as the situation then prevailing permits.

9. *Summary of any standby programs for any future emergency*

The only Federal Reserve program authorized under the Defense Production Act is the V-loan program. Plans contemplate that the Federal Reserve banks and the Board will be prepared to participate in an expanded V-loan program suitable to any future emergency needs.

10. Changes in organization during the past year

None.

11. Future objectives

As stated in section 301 of the Defense Production Act, the objective of the guaranteed loan program continues to be "to expedite production and deliveries or services under Government contracts."

12. Availability of funds for defense needs including the V-loan program

The guaranteeing agencies are authorized to use any moneys appropriated to them for defense purposes to meet any costs and expenses in connection with the V-loan program.

13. A statement of action taken as a result of any recommendations of the Joint Committee on Defense Production

None.

14. Such other information as may appear pertinent in summarizing your mobilization activities for the past year, including the V-loan program

Under the provisions of the Defense Production Act of 1950 as amended, the Attorney General is directed to make reports to the President of the United States and to both Houses of Congress on the results of surveys made for the purpose of determining any factors which may tend to eliminate competition, create or strengthen monopolies, injure small business, or otherwise promote undue concentration of economic power in the course of the administration of the Defense Production Act.

After an extensive survey, the Attorney General on August 8, 1958, rendered such a report. The following conclusions were reached by the Attorney General regarding the V-loan program:

"Our broad survey of the Defense Production Act V-loan program indicates that, on the whole, it operated satisfactorily. The program appears to have yielded material benefits to the three parties involved—the lenders, the borrowers, and the Government.

"The program resulted in considerable benefits to the Government. The $2.9 billion in V-loan credits and the more than $11.6 billion in disbursements under those credits involved the expenditure of private, not Government, funds. That the Government guaranteed the private lenders against most of the loss was sufficient to set in motion this large volume of defense production financing. Finally, contrary to many other Government financing programs, the V-loan program has been self-sustaining. The Government has thus far netted a profit in excess of $27 million, more than its profit under a World War II V-loan program involving a threefold greater volume of loans.

"The lenders, who in almost all cases were commercial banks, were enabled to extend close to $3 billion in credits at a minimum of risk and at a fair rate of profit, considering the lessened risk and the sharing of interest with the Government. The lending institutions did not face any loss of business through direct Government financing, since it was they who made and serviced the loans, disbursed their own funds, and decided whether to apply for a Government guaranty against loss. Moreover, the guaranteed portions of V-loans were not counted in computing the legal lending limitations governing the banks. Accordingly, to the extent that the loans were guaranteed, the banks did not commit their legal lending authority and were able to make nonguaranteed loans to others.

"In general, the borrowers benefited from the V-loan program since they were enabled to obtain a large volume of credits to finance their defense production on reasonable terms and for rather extended maturities. These were credits which in many cases would not have been available to them through other channels. In most cases, however, the borrowers did not have to mortgage their fixed assets to obtain these credits; it was sufficient merely to assign as security the moneys payable on the defense contracts which were being financed.

"The small and medium size groups of contractors by far predominated among the borrowers. While their share of the dollar volume of the program was substantially less than that of larger firms, it closely paralleled their proportion of defense contracts. Moreover, since their scale of operations was smaller, smaller business did not need or request anything like the dollar volume of V-loans obtained by large business. Indeed, if none of their V-loan applications had been rejected, small business would have received only a very slight additional share of the entire program.

"Small business received some particular benefits under the program. Since 1953 their applications, unlike those of large business, could not be denied merely because the goods and services for which V-loan financing was sought, were readily available from other sources. Moreover, the Government's ceiling on interest rates and its assumption of most of the risk of loss resulted in small business paying a lower interest rate on V-loan credits than it would have had to pay on nonguaranteed loans. Further, customary commercial credit standards may have been somewhat relaxed in small-business loans, since many small business firms received V-loans considerably in excess of their total assets.

"Apart from these benefits, the program enabled many small business firms to undertake defense contracts and subcontracts with the reasonable expectation that they could obtain sufficient working capital to proceed. It would appear, then, that the program broadened the base of firms seeking and undertaking defense contracts and subcontracts.

"It is difficult to measure further the competitive effects of the V-loan program because of the unsuitability of available data for detailed analysis. However, in general, it must be recognized that the V-loan program, designed to aid defense procurement, followed, rather than determined, the pattern of such procurement. That pattern involves a host of elements, of which the ability of the would-be defense contractor to finance his production is only one. Nevertheless by increasing the availability of such financing, this program widened the potential of firms to compete for defense contracts and subcontracts, and thus aided rather than adversely affected competition.

"In reinstituting the V-loan program in 1950, Congress professed its satisfaction with the way it had operated during World War II. Our survey indicates that the present program closely paralleled the earlier experience."

COMMERCIAL BANK PREPAREDNESS PROGRAM

1. Mobilization programs conducted by your office

Development of plans, in cooperation with the Department of the Treasury, including the Comptroller of the Currency, and the Federal Deposit Insurance Corporation, to encourage preparedness measures by the commercial banking system designed to assure continuity of operations of the banking system in the event of enemy attack, including the preservation of essential records.

2. The authority from which your office derives its powers for such programs

Defense Mobilization Order I–20.

3. A summary of each program

This program seeks to accomplish its purpose (1) by acquainting commercial banks with the importance of making plans for preservation of essential records and continuation of operations in the event of attack, and (2) by providing guidance as to how this might be done.

Two committees of bankers are working on the program—an Advisory Committee on Commercial Bank Preparedness and a Banking Committee on Emergency Operations, the latter a committee composed of senior operating officers. During the first part of this year, the committees have issued and distributed to all banks in the country copies of five booklets describing preattack preparedness measures. The committees are now working on a series of booklets concerning measures and operations following a destructive attack.

4. A statement on the effectiveness of each program

So far, emphasis has been on the preparation and distribution of the booklets referred to in No. 3 above. The next step is to encourage bankers to undertake the precautionary measures for their own institutions. It is, therefore, too early to comment on the effectiveness of the program.

5. A statement on the current need for the programs

It is believed that an effectively functioning banking system would be essential to the Nation in time of war as well as in peace, and that adequate preparedness measures are essential for such a continuing banking system.

6. A summary of the programs as related to small business

The program relates to the entire economy, to small business as well as large

7. Major problems which now confront your office in carrying out mobilization programs

General lack of realization of the necessity for such a program.

8. Changes in mobilization planning and readiness measures to meet future emergencies

None.

9. Summary of any standby programs for any future emergency

None.

10. Changes in organization during the past year

None.

11. Future objectives

Implementation of the program.

12. Availability of funds for defense needs

Not applicable.

13. A statement of action taken as a result of any recommendations of the Joint Committee on Defense Production

None.

14. Such other information as may appear pertinent in summarizing your mobilization activities for the past year

Accompanying this summary report are copies of the five booklets referred to in item 3.

Booklet No. 1

ORGANIZATION AND ADMINISTRATION

OF THE PROGRAM IN YOUR BANK

ADVISORY COMMITTEE ON COMMERCIAL BANK PREPAREDNESS

John J. McCloy, Chairman of Board, Chase Manhattan Bank, New York, N. Y., *Chairman*

Frank L. King, President, California Bank, Los Angeles, California

William F. Kurtz, Chairman, Executive Committee, First Pennsylvania Banking and Trust Company, Philadelphia, Pennsylvania

Homer J. Livingston, President, The First National Bank of Chicago, Chicago, Illinois

William A. Mitchell, President, Central Trust Company, Cincinnati, Ohio

E. C. Sammons, President, United States National Bank, Portland, Oregon

Merle E. Selecman, Executive Vice President, American Bankers Association, New York, N. Y.

BANKING COMMITTEE ON EMERGENCY OPERATIONS

G. Edward Cooper, Senior Vice President, The Philadelphia National Bank, Philadelphia, Pennsylvania, *Chairman*

Frank L. Beach, Vice President, United States National Bank, Portland, Oregon

Steve H. Bomar, Senior Vice President and Treasurer, Trust Company of Georgia, Atlanta, Georgia

Frank M. Dana, Vice President-Operations, Bank of America N.T. & S.A., San Francisco, California

Harold R. DeMoss, Vice President, Mercantile National Bank at Dallas, Dallas, Texas

George A. Guerdan, Vice President and Cashier, First National City Bank of New York, New York, N. Y.

C. Edgar Johnson, Vice President, The First National Bank of Chicago, Chicago, Illinois

Melvin C. Miller, Deputy Manager, American Bankers Association, New York, N. Y., *Secretary*

FOREWORD

This booklet and the others in this series, presenting a preparedness program for emergency operations in banking, represent many months of intensive development and preparation by an able and representative group of experienced bankers.

The booklets are designed to assist you to plan and to take the preparedness steps that are appropriate to your bank and to guide you in maintaining or restoring banking operations in a possibly seriously damaged economy. We urge you to use them to study the problems that you and your bank would face under conditions of enemy attack of a magnitude such as our country has never experienced.

Your defense preparations, completed before any such attack takes place, can be both a deterrent to war and, if war should come, an important means of winning it. The balance of victory in the event of a massive nuclear attack could well rest with the nation best prepared to most quickly get up off the ground, organized and ready to put to work its surviving resources.

It is recognized that plans will vary considerably among banks due to factors such as size, location, number of banking offices and the predominant types of business. The proposals set forth in these booklets are intended to serve as guidelines only. The important consideration is that each bank should have some sort of plan, tailored to suit its own particular problems, policies, and financial situation, and should know how to proceed in order to continue or resume its operations in either a damaged or undamaged area.

Good planning and sound defense preparedness measures throughout the banking system can minimize postattack confusion,

uncertainty and fear, both in damaged and undamaged areas, and could contribute greatly to recovery from attack. Your preparedness program for emergency operations, in the words of President Eisenhower, "may constitute the most valuable investment you can make toward assuring our survival as a free nation" in the event of attack.

Robert B. Anderson
Secretary of the Treasury

Alexander N. Miller
President, National Association of Supervisors of State Banks

Ray Gidney
Comptroller of the Currency

Jesse P. Wolcott
Chairman, Federal Deposit Insurance Corporation

Wm. McC. Martin, Jr.
Chairman, Board of Governors of the Federal Reserve System

PREFACE

This booklet is the first in a series prepared for the guidance of the nation's banks. It presents one phase of an overall program for bank preparedness to minimize the effects of possible enemy attack. Other phases of the program are covered in related booklets. Collectively, the publications are designed to form a manual on emergency operations, suggesting measures which should be taken now to facilitate the stabilization of our economy following a serious assault.

The government, through the Office of Defense Mobilization, has called upon all industry to develop emergency plans. Because of the vital importance of the banking system to the whole economy of the country, this places a heavy responsibility on bankers. It is essential that they take immediate steps to assure the restoration of necessary operations and functions with a minimum of delay should there be a disruption in activities. It is believed that the principles and procedures presented in this and companion booklets will serve that objective.

In addition to the members of the Banking Committee on Emergency Operations which collaborated in the preparation of this and subsequent booklets, sincere appreciation and thanks are given to Warren G. Hayes, Assistant Cashier, The Philadelphia National Bank, Philadelphia, Pennsylvania, for invaluable assistance in consolidating the work of the various writers and the corrections and suggestions which were offered on the manuscript during the writ-

ing of the booklets, and to T. G. Kane, Assistant Treasurer, Chase Manhattan Bank, New York, N. Y., for his helpful suggestions and for acting as a liaison representative between the two committees.

ADVISORY COMMITTEE ON COMMERCIAL BANK PREPAREDNESS

JOHN J. MCCLOY, *Chairman*

BANKING COMMITTEE ON EMERGENCY OPERATIONS

G. EDWARD COOPER, *Chairman*

INTRODUCTION

No one can really know what a large-scale nuclear attack upon the United States would be like. What we do know, however, is that it would be vastly different from anything that has ever been experienced. New weapons have horribly increased the dangers and terrors to which the civilian population would be subjected. An enemy attack, in all likelihood, would be spearheaded by H-bombs simultaneously delivered on many target areas. In an all-out effort, this could be accompanied by high-explosive and incendiary bombs of the conventional type, chemical and biological warfare, sabotage, and various forms of psychological warfare designed to inflict tremendous casualties, disrupt production, create widespread panic, and generally weaken the will to resist.

In such an attack, it must be assumed that included among the targets would be most, if not all, of the financial centers in every section of the country. Rural districts, as well as metropolitan areas, would feel the effects of the assault, especially from fallout. It must also be assumed that the attack would be based on the element of surprise; that it would result in great confusion throughout the country and in all aspects of civilian activity, including severe disruption of transportation and communication facilities; and that the most solid structures such as bank vaults, even though not destroyed, would become inaccessible. It must further be assumed that some of the banks' key management personnel would not survive.

This is anything but a pleasing picture. However, it is not a hopeless one. There has been a great deal of talk and speculation, and perhaps some ill-informed writing, on the probable results from an attack by hydrogen bombs. Many people are prone to view

the seemingly insurmountable odds with a "there's not much we can do about it" attitude. When one considers the almost incomprehensible power of the H-bomb and the delayed-action horrors of radioactive fallout, that is perhaps understandable. What is not generally appreciated is that a great deal can be done to mitigate the effects of modern weapons. If we can achieve—as we must—proper, adequate, and efficient preparedness measures, we can very greatly cut down the number of casualties and the extent of damage that must inevitably occur if this country is attacked with modern weapons.

PREPAREDNESS PLANNING

Survival of the banks of the country in the face of threats such as these cannot be left to chance. Industrial recovery from devastating assault is not automatic. Survival and recovery can be assured only by the most careful and painstaking planning in the development of measures of self-defense and reconstruction. Following an attack, the problems which would confront the surviving members of the staffs of banks would be staggering, to say the least. It is difficult to see how the surviving management could even make a start toward the restoration of operations without some sort of predetermined plan.

This all adds up to a job now for bank management. **The terrible consequences of attack make it mandatory that every bank give attention to the formulation of a plan for the protection of personnel and facilities.** Responsibility for developing the disaster plan rests with the management of each individual bank. In addition, the understanding and enthusiastic support of all personnel, plus full cooperation with neighboring banks and local civil defense authorities, are essential to its ultimate success.

By necessity, defense planning will vary among banks. The size of the institution, its location, the number of banking offices, and the types of business predominating will influence the scope and emphasis of its plan. Many of the provisions described herein will be inappropriate and unnecessarily elaborate for the smaller banks. What would be feasible, even necessary, for a large metropolitan

bank may not be suited at all to the needs of its distant correspondent. It is not expected that these smaller banks should plan for extensive internal organizations along the lines of those desirable for larger institutions; nevertheless, the fundamental principles set forth herein are applicable to all banks and can be beneficial to them, even the smallest. The important consideration is that each bank should have some sort of plan, tailored to suit its own particular problems, policies, and financial situation, and should know how to proceed in order to continue or to resume its operations, whether it is in a damaged or undamaged region.

In broad terms, defense planning in banks should give consideration to the following areas:

1. Organization and administration of the program in the bank
2. Personnel protection
3. Continuity of management and alternate headquarters
4. Physical properties
5. Duplicate or alternate records
6. Collection of cash items and noncash items
7. Cash (currency) operations
8. Customer participation in banking program
9. Credit.

These subjects are given treatment in a series of booklets which, in the aggregate, are designed to form a manual on emergency operations. They attempt to present the guiding principles and procedures which it is believed should be followed by the banks of the country. Detailed planning for the carrying out of essential functions is left generally to the individual banks. Uniformity of approach in the handling of particular operations is desirable, however, and to that end, the planning in appropriate areas should be developed at the clearinghouse or regional level.

It is expected that the Treasury will authorize the Federal Reserve banks to perform certain functions and duties during an emergency ordinarily performed by the Treasury itself. Similarly,

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the Federal Reserve banks may designate certain commercial banks to assume substantial duties on behalf of the Federal Reserve banks. The overall plan calls for one coordinated effort. In each bank's planning, therefore, the need for coordination with other banks and agencies is paramount. In all phases of the planning, the matter of liaison with civil defense officials assumes prime importance and is continually stressed throughout these booklets.

It is recognized that future developments in all probability will necessitate revisions in the various aspects of emergency planning, and it is inherent in the nature of such planning that it be kept fluid. However, it does not necessarily follow that future developments will complicate plans already in existence. National security and self-interest point to the need for immediate planning; and, even though some uncertainties exist, it seems essential, therefore, for banks to complete their programs promptly, rather than to delay action in the hope that the resolution of some of these uncertainties will make planning easier at some future date.

ORGANIZATION AND ADMINISTRATION

The motivation for initiating a plan for emergency operations should stem from top management. Without a proper recognition and appreciation of the need for a step-by-step program with reasonable achievement dates, it is questionable if an effective plan can be formulated. Initial emphasis must be placed on the organization. With the chain of responsibility established, attention then may be given to other administrative matters such as arrangements for funds for postattack operations, mutual aid, the preparation of a manual or other written instructions, and practice tests to appraise the adequacy and effectiveness of the program.

ORGANIZATION

The first important step of management in setting up a preparedness program is the delegation of responsibility to a person or persons who have the necessary imagination, ability, and authority to initiate and vigorously carry out the project. In some banks this may rest with one individual; in others a committee will be appointed to function in a planning and advisory capacity. In all cases, however, it seems advisable for management to designate one person to coordinate the development and maintenance of the overall plan. He should be selected from top management level and should be given the necessary time and authority to administer the program. In the committee approach, this person might be made chairman. Other members of the committee should be selected to include representation from the various departments or functions of the bank. For the very large institutions, an organization chart might be helpful in denoting lines of succession and responsibility. All matters of organization should be subject to systematic review.

ARRANGEMENTS FOR FUNDS

Following a serious attack, supplies of currency may be destroyed or made inaccessible. Established procedures for obtaining additional cash or transfers of funds likewise may be badly disrupted. Yet under such conditions, it is likely that money will be needed promptly to provide for interim wage payments, cash advances to employees, and possible purchases of medicine, food or equipment. Some thought, therefore, must be given to emergency arrangements to provide funds in the immediate postattack period. Plans in this area will vary considerably. Adequate and feasible authorizations for the withdrawal of funds from correspondent banks, deposits of small amounts of currency at a relocation site, and appropriate arrangements with nearby banks are possible approaches to be studied by the individual bank. It is important that the needs of the surviving bank personnel not be overlooked in the planning.

MUTUAL AID

Organizations for mutual aid proved highly successful in Great Britain and Germany during World War II. American industry likewise has recognized the value of mutual aid plans in time of disaster, and many large plants have established pooling arrangements to obtain needed workers, equipment and supplies. Because of the importance of restoring disrupted banking operations as quickly as possible, banks should initiate and explore all possible avenues of mutual aid. Clearinghouse or other group organizations would seem to be the logical starting point for plans of this nature.

MANUALS

All banks, regardless of size, will find it helpful to record the basic plans for emergency operations in a manual or in other written form. This will not only serve to minimize confusion and misunderstanding, but will inform personnel concerning their specific duties under the plan. In some instances the manuals may be elaborate and quite complete, setting forth in detail the procedures to be

followed for preattack and postattack action. Separate sections devoted to all or most of the subjects covered by this and companion booklets may be prepared which, in toto, will represent a bank's plan for emergency operations. Smaller banks may elect to merely record the master plan in outline form, omitting much of the detailed information. Irrespective of the method of approach, all banks are urged to reduce the plans to writing and to keep them current by periodic review and revision. Sufficient copies of the manual or written instructions should be maintained in the alternate headquarters or relocation centers, as well as in the main office vault.

It may be decided to keep certain aspects of the plan confidential, for example, matters concerning management succession and possible financial arrangements to obtain and distribute currency. In general, however, it seems advisable to apprise all personnel of the details of the program and the procedure they will be expected to follow in an emergency.

PRACTICE TESTS

After the basic plan has been developed and employees informed of their specific duties, practice drills are suggested as a means of revealing possible weaknesses and to promote familiarity with routine. Where alternate headquarters or established relocation points are made a part of the plan, these should be included in the practice tests. Each institution, of course, must decide on the scope and frequency of the drills. These factors also may be varied as dictated by the apparent seriousness of the situation.

APPENDIX

I-Gen-DMO-20
February 15, 1956

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF DEFENSE MOBILIZATION

DEFENSE MOBILIZATION ORDER-I-20

SUBJECT: Assignment of Defense Mobilization Responsibilities to the Board of Governors of the Federal Reserve System

By virtue of the authority vested in me pursuant to the National Security Act of 1947, as amended; Reorganization Plan No. 3, effective June 12, 1953; the Defense Production Act of 1950, as amended; Executive Order 10480 of August 14, 1953; and in order to facilitate the development and coordination of Federal policies and programs for current defense activities and readiness for any future mobilization, it is hereby ordered:

1. The Board of Governors of the Federal Reserve System (hereinafter referred to as the Federal Reserve Board) will be responsible for the development of national security preparedness measures relating to monetary and bank credit policies and programs. With the cooperation of the Department of the Treasury (including the Comptroller of the Currency), the Federal Deposit Insurance Corporation and others, the Federal Reserve Board (which is hereby authorized to act with and through the Federal Reserve Banks) will develop national security preparedness programs relating to the operation of the banking system.

2. Among the measures for which the Federal Reserve Board will be responsible are the following:

(a) Development of plans and regulations for appropriate general and selective credit controls to curb inflationary pressures during various types of mobilization emergencies.

(b) Preparation, in cooperation with the Department of the Treasury, including the Comptroller of the Currency, and the Federal Deposit Insurance Corporation, of plans for maintenance of the monetary system, including the availability of deposit money, the issuance of currency, and the provision of essential bank credit, under conditions of attack.

(c) Development of measures in the monetary and bank credit fields to deal with the potential economic consequences of attack.

(d) Development of plans, in cooperation with the Department of the Treasury, including the Comptroller of the Currency, and the Federal Deposit Insurance Corporation, to encourage preparedness measures by the commercial banking system designed to assure continuity of operations of the banking system in the event of enemy attack, including the preservation of essential records.

(e) Development and maintenance of specific plans to assure the continuity of the essential functions of the Federal Reserve System in the event of attack on the United States.

(f) Development and presentation of such other proposals and plans as would be essential, in the judgment of the Federal Reserve Board, to the maintenance and stabilization of the economy under various types of mobilization emergencies.

3. Such preparedness measures will be undertaken on a basis consistent with defense mobilization assumptions and objectives for the government as a whole. To assure such consistency and coordinated planning, proposed programs will be submitted to the Director of the Office of Defense Mobilization or developed jointly.

4. This Order shall not affect any delegation of authority heretofore conferred upon the Federal Reserve Board.

OFFICE OF DEFENSE MOBILIZATION

Arthur S. Flemming
Director

SELECTED REFERENCES

(Since weapon capabilities constantly change, the following list of reference materials is limited, for the most part, to materials of recent date. Even so, later revisions and more recently issued publications should be sought and substituted when possible. References to earlier publications will be found in many of the publications listed.)

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Office of Defense Mobilization. *Reducing our Vulnerability to Attack*, (Report of the Office of Defense Mobilization to the Joint Committee on Defense Production), May 20, 1957. Office of Defense Mobilization, Washington 25, D. C. No charge indicated.

National Planning Association. *Planning Pamphlet No. 92*, containing "A Program for the Nonmilitary Defense of the United States," (A statement on National Policy by the NPA Special Policy Committee on Nonmilitary Defense Planning) and "The Tasks of Nonmilitary Defense and the Present Status of Planning" by William H. Stead, May 1955. National Planning Association, 1606 New Hampshire Avenue, N. W., Washington 9, D. C. $1.50 per copy.

THE NATURE OF THE THREAT

Federal Civil Defense Administration. *FCDA Planning Assumptions*, Advisory Bulletin 204, Sept. 4, 1956. Federal Civil Defense Administration, Battle Creek, Michigan, or local civil defense authority. No charge.

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Bulletin of the Atomic Scientists. Published monthly except in July and August by the Educational Foundation for Nuclear Science, Inc. Distributed by University of Chicago Press, 5750 Ellis Avenue, Chicago 37, Illinois. Annual subscription $5.00.

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..... *Industry Planning for the Continuity of Production in the Event of Enemy Attack*, (Special Conference Proceedings), 1957. Office of Industrial Mobilization, Business and Defense Services Administration, U. S. Department of Commerce, Washington 25, D. C. No charge indicated.

Federal Civil Defense Administration. Technical Bulletins and other publications may be obtained from local civil defense authority or Federal Civil Defense Administration, Battle Creek, Michigan, without charge. May be purchased from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at prices indicated.

..... *Industry Defense—Sources of Reference and Guidance*, Technical Bulletin 16-3, Revised June 1956. 5 cents per copy.

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Wood, Marshall K. "Industry Must Prepare for Atomic Attack," *Harvard Business Review*, May-June 1955 (reprint). Local civil defense authority. No charge indicated.

Parris, Donald S. "The Role of Management in Industrial Defense," reprint from *Signal Magazine*, (Official Journal of the Armed Forces Communications and Electronics Association), Sept.-Oct. 1955. Available from Business and Defense Services Administration, U. S. Department of Commerce, Washington 25, D. C. No charge indicated.

American Iron and Steel Institute. *Industrial Defense Planning Manual—Iron and Steel*, September 1954. American Iron and Steel Institute, 350 Fifth Avenue, New York, N. Y. 50 cents per copy.

National Petroleum Council. *Disaster Planning for the Oil and Gas Industries*, May 1955. National Petroleum Council, 1625 K Street, N. W., Washington 6, D. C. $1.25 per copy.

"Preparation for Peacetime and Wartime Disaster in Industry," *Civil Defender Magazine* (Special Industrial Issue No. 1), 1956. Civil Defender, P. O. Box 1641, Mobile, Alabama. $1.00 per copy.

Booklet No. 2

PERSONNEL PROTECTION

PREFACE

This booklet is the second in a series prepared for the guidance of the nation's banks. It presents one phase of an overall program for bank preparedness to minimize the effects of possible enemy attack. Other phases of the program are covered in related booklets. Collectively, the publications are designed to form a manual on emergency operations, suggesting measures which should be taken now to facilitate the stabilization of our economy following a serious assault.

The government, through the Office of Defense Mobilization, has called upon all industry to develop emergency plans. Because of the vital importance of the banking system to the whole economy of the country, this places a heavy responsibility on bankers. It is essential that they take immediate steps to assure the restoration of necessary operations and functions with a minimum of delay should there be a disruption in activities. It is believed that the principles and procedures presented in this and companion booklets will serve that objective.

In developing the material, the need for a considerable degree of flexibility was recognized. The following suggestions, which are quoted from the Introduction appearing in Booklet No. 1, are repeated by way of explanation:

> By necessity, defense planning will vary among banks. The size of the institution, its location, the number of banking offices, and the types of business predominating will influence the scope and emphasis of its plan. Many of the provisions described herein will be inappropriate and unnecessarily elaborate for the smaller banks. What would be feasible, even necessary, for a large metropolitan bank may not be suited at all to the needs of its distant correspondent. It is not expected that these smaller banks should plan for extensive internal organizations along the lines of those desirable for larger institutions; nevertheless, the fundamental principles set forth herein are applicable to all banks and can be beneficial to them, even the smallest. The important consideration is that each bank should have some sort

> of plan, tailored to suit its own particular problems, policies and financial situation . . . Detailed planning for the carrying out of essential functions is left generally to the individual banks. Uniformity of approach in the handling of particular operations is desirable, however, and to that end, the planning in appropriate areas should be developed at the clearinghouse or regional level.

In many areas of planning, it will be advisable, and even necessary, to consult with neighboring banks and local civil defense officials. The importance of avoiding possible conflict with civil defense plans is axiomatic. Wherever possible, therefore, coordination should be a basic consideration. Banks also are urged to get their programs in motion promptly. Again, to quote from the Introduction of Booklet No. 1:

> It is recognized that future developments in all probability will necessitate revisions in the various aspects of emergency planning, and it is inherent in the nature of such planning that it be kept fluid. However, it does not necessarily follow that future developments will complicate plans already in existence. National security and self-interest point to the need for immediate planning; and, even though some uncertainties exist, it seems essential, therefore, for banks to complete their programs promptly, rather than to delay action in the hope that the resolution of some of these uncertainties will make planning easier at some future date.

ADVISORY COMMITTEE ON COMMERCIAL BANK PREPAREDNESS
JOHN J. MCCLOY, *Chairman*

BANKING COMMITTEE ON EMERGENCY OPERATIONS
G. EDWARD COOPER, *Chairman*

PERSONNEL

Employees are a bank's most important asset. This is as true in time of war as in time of peace. In fact, manpower was the most critical United States shortage in World War II and, in all probability, would be again in another war. In an enemy attack, there seems little doubt that the chief target for H-Bombs would be our manpower—and that means *people*. "Above all, protect your people" is the advice of the bombed European industrialists—learned the hard way. The continued existence of our country and our way of life is dependent upon the safety of our people.

Effective civil defense against nuclear attack is entirely feasible, but it requires advance planning and cooperation. Measures must be developed that will safeguard our people to the greatest degree possible, even though great loss of life is to be expected in the immediate area where bombs fall. Banks must lend a hand through their existing organizational structure in order that they can be in a position to carry on for survival and resume operations as soon as possible following a disaster.

It is the responsibility of management, therefore, to provide every possible means for safeguarding the lives and health of its employees. Every employee must know that management, as well as the government, will do all within its power to protect him, his family, and his job. A bank's disaster plan in formulating protective measures for personnel should provide for:

1. Protection from modern weapons during an attack
2. Special welfare services following an attack
3. Medical aid for the injured
4. A training program to assure better preparedness in dealing with an emergency.

Civil defense authorities have the overall responsibility to minimize the effects on people caused by an attack on the United States and to deal with the immediate conditions created by such an attack; consequently, there must be an integration of disaster plans for industry with those of the community. A close liaison with the local civil defense director and his staff therefore is essential in planning all of these activities.

PROTECTION

In line with defense planning in other industries, banks must take steps to minimize the possible effects of devastating weapons on the physical well-being of their employees. These would include provision for shelters, dispersion and evacuation plans, radiological protection, and a program of employee education.

SHELTERS

Each bank should formulate a shelter policy and a shelter program. Few, if any, banks will find it feasible to construct new shelters for employees. The alternative lies in a critical engineering analysis of existing structures and facilities to determine areas where maximum protection is afforded. The latest government information on protective construction should be used as a guide in selecting shelter areas. In general, a shelter area should be accessible to its intended occupants, should be located in a building at least strong enough to withstand blast without complete collapse, should offer protection from radiation and the flying debris of adjacent areas and from the collapse of overhead areas, should be free from special hazards of its own, and should have at least two means of exit. It is recognized that these conditions are ideal and may not be found in their entirety in existing buildings, but they can serve as standards for purposes of evaluation. Differences in location and local civil defense arrangements, including the possible designation of public shelters in close proximity to banking offices and available for bank personnel, will influence the planning. The

important point is that each bank should plan for shelter protection, including appropriate alarm installations, direction signs, and other physical facilities.

DISPERSION AND EVACUATION

Obviously the best defense against nuclear attack is dispersion —don't be there when the bomb hits! Dispersion, however, poses innumerable problems; in fact, it is almost out of the question for most banks, particularly as a daytime measure. Banks operating branch systems and those larger institutions having employees working shift hours are in a little more fortunate position in this respect. Where possible, defense planning should take into consideration the advantages of dispersion, mindful that distance and scattered distribution are the best insurance of survival.

Dispersion is also an important factor in making assignments of employees to shelters. For example, it is better to have the officers or the tellers or the bookkeepers assigned to more than one shelter area, rather than having all of any particular group occupying the same shelter.

Akin to dispersion as a protective measure is evacuation. The object of evacuation plans is to move the greatest number of people away from the potential targets to an area of comparative safety in the shortest possible time. Evacuation calls for complete cooperation from all participants and therefore it is a matter for civil defense control. In this respect, civil defense planning usually calls for one of the following courses of action: (1) city-wide evacuation, or (2) shelter protection. The controlling factor is time. If sufficient warning is given, evacuation will be in order. If the advance warning is relatively short, a "seek cover" order will be given. Banks will be guided by local defense planning in the matter of evacuation.

RADIOLOGICAL PROTECTION

The best protection against radiation and fallout is shelter. This protection will be needed during the blast or emergency period and, depending upon the intensity and proximity of the burst, for

a time following the attack. Until they can safely emerge from shelters, people will require food and water perhaps for more than a week. Stocks of both should therefore be maintained. Thereafter, it may be necessary to undertake reclamation, decontamination, and repair measures. Most radiological protective operations require the services of trained technicians with specialized equipment. People can be taught how to decrease the bad effects of radiation, however, by following proper procedures. All bank employees should be informed concerning the nature of the danger and the measures they can take, including personal decontamination. Pamphlets on the subject are listed in the Selected References. In addition, instructions for safeguarding the community will be issued from time to time by the civil defense authorities establishing the procedures which are to be carried out.

EMPLOYEE HANDBOOKS

The importance of having an alert, informed citizenry trained to the techniques of survival in the event of a nuclear attack cannot be overemphasized. Our freedom and life itself may well depend on how we prepare to live through an attack. Recognizing the importance of preparedness, some industrial concerns have distributed handbooks to all of their employees, telling them how to protect themselves, their families and their homes. It is advisable for banks to follow suit, so that their employees may have a clear understanding of the basic protective steps which can be taken to avoid unnecessary injury and loss of life. Helpful material of this nature has been published and is available for distribution by the Federal Civil Defense Administration.

EMPLOYEE WELFARE

Following an attack, anxiety, fright, panic and similar disturbances on the part of employees can be minimized by furnishing special welfare services to the working force. These would include

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the collection and prompt dissemination of information, the rendering of financial aid, and activities to bolster morale.

INFORMATION SERVICES

It must be recognized that, in time of enemy attack, the first concern of employees will be the welfare of their families. They will want to know what has become of husbands, wives, and children and, in all probability, their first impulse will be to get to the side of their loved ones. During a period of emergency, they also will want information on a host of other matters, such as medical aid for casualties; problems attending death; injury allowances; emergency food; temporary accommodations; home repairs; assistance as the result of loss of money, clothing and household effects; and loss of employment because of property damage.

Past experience dictates that every effort should be made to provide employees with direct and reliable information. During World War II, European firms stressed the importance of prompt reports on the areas attacked. Both British and German companies attempted to allay the fears of workers from those areas by permitting them to go home. Any plans of this nature, however, must of necessity be subject to civil defense regulations governing travel during the emergency.

FINANCIAL AID

Among the many personal problems created by an emergency will be the need for financial assistance. If a disaster interrupts regular payroll procedures, banks will want to make some provision to take care of their employees in the interim. One plan to meet this contingency might be an agreement with a correspondent bank in another locality whereby special compensation payments could be distributed by the latter according to a prearranged schedule. Another method is to prepare and store special payroll checks at one or more locations. These checks can be identified in various ways, including significantly colored paper, and may be prepared in fixed amounts. Under this plan, it might be well to take certain precau-

tionary measures, such as requiring a signature from one of several predesignated officials, lodging the proper authorization with the paying bank, and providing vault storage under audit control for the unissued stock of checks.

MORALE

It has been said that "All civil defense measures in war are designed to achieve one object—the maintenance of the morale of the civilian population."[1] When the will to survive and to make sacrifices collapses, so does the war effort. If morale is to be maintained, people must be kept busy. During a period of emergency, banks can make a most important contribution toward maintaining morale by simply acting to keep their people busy. Idleness breeds fear and anxiety, increasing the threat of panic. Advance plans to put people to work as soon as possible—cleaning up rubble, making repairs, restoring operations, doing anything of useful purpose to keep them occupied—will strengthen morale. Programs to build morale center around three principal functions: information services, welfare services, and activity.

MEDICAL

An important phase of the program for personnel protection is the planning for first-aid to the injured and the care of casualties. This will embrace a variety of activities, including organization of medical and first-aid personnel, procurement of equipment and supplies, establishment of emergency casualty stations, care of the injured, and provision for mutual aid.

There is no yardstick on which to base the extent of needed facilities or to anticipate the number of probable casualties. In medical planning, it might be wise to assume that for the first twenty-four hours after enemy assault a stricken office will be almost completely on its own. With widespread destruction, it will require considerable time for trained and equipped medical personnel to be

[1] Major General J. S. Lethbridge, Commandant of the British Civil Defense Staff College.

organized and transported under adverse conditions. Meanwhile, medical treatment at the scene may have to be limited mainly to the relief of pain and to life and limb-saving measures.

MEDICAL PERSONNEL

Many of the larger banks have a physician and/or nurses in permanent employ. These doubtless will be assigned to emergency duties. Smaller institutions might seek the services of local civilian doctors on a consultant and/or stand-by basis to aid in the planning and training activities and to work with the bank during emergencies. Similar arrangements might be made with trained nurses in the community who are on private duty, or perhaps who are inactive because of marriage or other reasons. Their part-time employment and assignment to assistance during emergencies should be considered. Notifications of commitments of doctors and nurses should be made to the local civil defense medical authorities as they may be considered more valuable in other locations and assigned accordingly in emergencies by the civil defense officials.

There also may be members of a bank's work force with sufficient training and experience to be assigned to the medical detail. Care should be exercised, however, in selecting the people to perform emergency duties, and those chosen should receive thorough training in first-aid. Improper handling of injured persons can cause far more harm than the original injury.

EQUIPMENT AND SUPPLIES

It would be practically impossible for a bank to purchase and store sufficient medical supplies to adequately meet the demands in any major disaster, but it should stock some. Where a dispensary or medical facility exists (as in many larger institutions), the normal supply could be expanded, and other banks might seek the advice of local physicians or medical authorities in planning for supplies. In any event, it will be apparent that a bank can stock for emergency requirements for a limited time only. Outside help would then be required. Liaison with the local civil defense authorities

and officially designated Emergency Medical Supply Depots is important in obtaining outside assistance and in establishing supply lines for replenishment. See the Appendix, page 21, for suggested medical and first-aid supplies.[2]

Surveys of the bank premises should be conducted to determine the best locations to store medical supplies for use in times of emergency. Where feasible, dispersion of supplies is desirable for better chances of survival. Consideration should be given to the storing of some medical supplies in the relocation office, since it is likely that injured persons may be among those making their way to this center. A word of caution is advisable in connection with the handling of medical supplies. Items which are subject to deterioration should be carefully watched and their use in dispensaries rotated. Special control also should be exercised over pain-relieving narcotics.

EMERGENCY CASUALTY STATIONS

Most large banks have established dispensaries or medical offices to care for those employees who might be in need of medical attention during the normal day-to-day operations. These institutions should prepare plans covering the designation of additional areas which could be utilized as first-aid stations and collection points for casualties during periods of major disaster. Cafeterias, locker rooms, and locations with similar facilities (water, heat and light) could probably be converted at short notice to serve the injured. Smaller banks likewise should recognize the need for predesignated areas to expedite the care of casualties.

Functions performed in these stations might include screening casualties to determine priority of attention, administering first-aid and initial medical care, preparing identification and casualty records, arranging for transportation to hospitals or medical centers, and coordinating activities with civil defense authorities.

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[2] See also Federal Civil Defense Administration, *The First-Aid System*, Part I of *Organization and Operation of Civil Defense Casualty Services*, Technical Manual 11-1, January 1953.

CARE OF CASUALTIES

The rescue of persons trapped in damaged buildings is basically a medical function. These operations require special training and care in order to prevent unnecessary harm to the injured as the result of improper handling. Because of the nature of the work and the need for specialized knowledge of buildings and their structural features, teamwork is essential. Industries with huge factories and plants have organized teams for this work. Banking institutions, having buildings of heavy or multistoried construction and having forces of maintenance personnel, also may want to consider the organization and training of persons for possible rescue activities.

Knowledge of the identity of the injured should be made available to medical personnel and to their families as soon as possible. A supply of identification cards or tags, kept on hand and in readiness, will facilitate this procedure. Use of the standard form of the medical tag that has been approved for civil defense is suggested and a copy appears in the Appendix, page 23.[3]

Many lives can be saved by simple first-aid measures, such as artificial respiration, stoppage of bleeding, and treatment of shock. A first-aid training program can be developed by the bank itself or the bank may take advantage of the first-aid courses offered by the American Red Cross and, in communities directly connected with the mineral industries, by the Bureau of Mines. A bank might utilize the services of the Red Cross or the Bureau of Mines for training instructors, who, in turn, could train others selected from the staff. Since those who might administer early medical treatment may themselves be casualties, it is important that widespread first-aid instructions be given to the work force. Some authorities advocate that one employee in ten receive thorough first-aid training; others advise one in five. In event of enemy attack, the need for employees trained in first-aid methods will be great. All casualties will require

[3] Federal Civil Defense Administration, *Medical Records for Casualties*, Part III of *Organization and Operation of Civil Defense Casualty Services*, Technical Manual 11-3, March 1952 (Reprinted September 1957). This publication contains information about the approved civil defense Emergency Medical Tag and instructions for its use.

on-the-spot treatment, followed by removal of the more serious cases to casualty stations or hospitals.

Another important task in connection with the care of casualties is the examination for exposure to radiation. Casualties must be checked for radioactive matter and be decontaminated if necessary. Radioactivity can be detected only by instruments, and decontamination is a matter for nuclear specialists after diagnosis of the kind and degree of dosage. Since treatment for radiation is not given for a full day or more after exposure, most banks may find it desirable to rely on established decontamination teams under direction of civil defense authorities, rather than attempt to include this activity in their own planning. It is of interest in this connection that the human body does not become radioactive and persons previously exposed, therefore, can be handled with safety.

MUTUAL AID

The number of casualties which would occur following an atomic or hydrogen blast might assume staggering proportions, and only a community-wide plan can solve the problems of medical defense. No one bank can be expected to take care of all of the employee casualties which a concentrated attack would produce. It is of tremendous importance, therefore, that advance planning be developed as a cooperative effort of local banks and other business organizations through clearinghouse associations and other group action. Banks must be prepared to help and to be helped in the event of a serious disaster. Each of the participating banks should designate one individual to serve as its contact man or coordinator. Frequent communication with other banks and with local and state civil defense authorities can give better assurance of a coordinated program to pool resources in an emergency.

TRAINING

"Early peacetime training with test exercises is the key to building a successful air-protection organization, according to Euro-

pean industrialists and civil defense authorities. European companies stress that in an emergency people must know exactly what to do and how to do it. And they must act automatically, almost without thinking. This can only be achieved after thorough training and repeated exercises." [4]

Training of personnel is a most essential part of any preparedness program, since preparedness comes through thorough training. Good training also is the basis of good morale. Training through proper instruction and correct information combats ignorance and fear. The training program should reach everyone in the organization—a three-fold program, covering training for the coordinator and his service heads, specialized training for the protective services, and general training for all employees.

INSTRUCTION

Assistance is available from many sources to prepare leaders for defense responsibilities. The Federal Civil Defense Administration maintains a Staff College at Battle Creek, Michigan, where courses are designed for those responsible for the policies and direction of defense activities. Courses also are conducted by many local civil defense organizations and other groups, including various state universities. In addition, there are many FCDA publications which outline the plans, methods, and techniques of survival planning, organization, and operation.

In time of disaster, personnel with specialized training will be needed. This will include such activities as fire fighting, rescue procedures, and guard and police duties in the directing of people. Special training courses have been organized by the FCDA and other organizations to cover these protective services. There are also FCDA training manuals available on the individual subjects.

In the interest of self-preservation, every employee will need some sort of training. Lectures, safety talks, movies, pamphlets, and other promotional material are appropriate in transmitting

[4] *Protecting Personnel in Wartime*, National Industrial Conference Board, Inc., New York, N. Y., January 1952, page 68.

basic information on panic control, evacuation procedures, and self-protection. Much can be accomplished by the printed word. Educating people to protect themselves is an important responsibility of management, but it can be a difficult task. Part of the job of instruction is psychological—it must place due emphasis on the necessity for protective measures which only the people themselves can carry out.

TRAINING METHODS

Training methods will vary with the size of the institution, the subject, the facilities available, the time provided, etc. In some cases, leaders may take special courses to become instructors, and they, in turn, will then schedule classes or training sessions for the work force. In others, instruction may be given to small groups by outside specialists. The general plans may call for short sessions with group participation in discussion and demonstration. Posters, films, pamphlets, and instruction manuals make helpful training aids. Suitable publicity in house organs or local newspapers will help to "set the stage." As a practical matter, instruction methods can be developed by the individuals responsible for setting up the training program.

The importance of refresher training also should be recognized. Some of the larger industrial organizations have planned refresher courses as part of their overall training programs. This enables those employees already trained to keep abreast of newly-developed techniques, and at the same time maintains a higher degree of preparedness.

TEST DRILLS

"Some European industrialists recall that their first reaction to test exercises and dry runs . . . was that it was nonsense—a waste of good time and a worse waste of good money. A few still think so. However, most now feel that they are indispensable to the building of an effective air defense team." [5]

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[5] *Protecting Personnel in Wartime*, National Industrial Conference Board, Inc., New York, N. Y., January 1952, page 71.

It is doubtless true that a great many Americans maintain the same viewpoint. One of the great problems in connection with training programs is how to develop the cooperative spirit and the will within each individual for wholehearted support.

Leaders of European companies say that dry runs are most important in training personnel for a number of reasons. Test exercises, if realistically carried out, reveal weak points of protection programs—weak points which may lose lives. They emphasize that, "Even if some of it appears to be tom-foolery, the whole inconvenience is justified for one reason. Dry runs point out that your normal communications are gone and the problems then to be overcome are brought home rather sharply." [6] Another important lesson to be learned from dry runs is the necessity of a high degree of coordination between the various defense organizations. They also provide a good measure of the actual effectiveness of the training program —what revisions are necessary, what spots need further emphasis, how much retraining is required. Furthermore, dry runs are of particular value in training personnel in evacuation procedures and in accustoming them to being in shelters.

Practice exercises should be pre-planned and pre-announced at first, but should become surprise drills when the organization appears ready.

PANIC CONTROL

"The Japanese estimate that 20,000 people died in Hiroshima from the effects of panic alone. The people, unprepared either physically or mentally in civil defense matters, ran from the city wildly, and many were trampled, or rushed into fires, or were pushed off bridges into lakes and rivers to drown. Many fled into the hills suffering from radiation illness, removing themselves beyond the reach of medical aid. Following the atomic bombings, the appearance of a single plane over a Japanese city caused a wave of terror in the populace, total stoppage of production, and more

[6] *Protecting Personnel in Wartime*, National Industrial Conference Board, Inc., New York, N. Y., January 1952, page 71.

widespread damage than hundreds of planes had done previously." [7]

The foregoing provides evidence that, in time of serious enemy attack, the alternate of thorough training is chaos. The emotional disturbances of large crowds once they get under way—mass panic—can easily become impossible to control. However, this is not conclusive evidence that the American people would be the victims of mass hysteria. Observers of disasters in this country are repeatedly impressed with the courage and resourcefulness of both the people and the social organizations within the community.

Nevertheless, confusion and despair do exist in times of disaster. These conditions are aggravated by lack of information, weak leadership, conflicting reports, rampant rumors, and broken communication lines. Measures to prevent occurrences such as these will help to prevent and control panic. Danger of panic can be reduced materially by preassigning a job to be done by every employee during an emergency. Practice in orderly evacuation will help to combat possible panic. Authorities say that one of the best aids in preventing panic and assuring orderly evacuation is to practice going to shelters and become accustomed to actually being in shelters.

What has been termed "psychological first-aid" is another panic control measure. Psychological first-aid is a form of treatment for persons who are grossly upset emotionally. Victims of disaster are subjected to stresses of great severity and intensity, sometimes causing them to react quite differently from their usual behavior. Just as the knowledge of a few basic surgical principles enables many nonmedical people to give first-aid for physical injuries, an awareness of certain psychological facts can greatly simplify the care and recovery of terrified, depressed disaster victims. Information on psychological first-aid is available from FCDA agencies.

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[7] Mervyn Molloy, *Business Survival in the Face of Atomic Attack*, Systems and Procedures Association of America, New York, N. Y.

APPENDIX

SUGGESTED MEDICAL AND FIRST-AID SUPPLIES

First-aid cabinets should be placed in the first-aid stations located at readily accessible places throughout the facility and should be properly stocked with first-aid supplies, stretchers and blankets.

All casualty services' supplies and equipment should be under the supervision of the chief, casualty services. In the event supplies are used for any reason during peacetime, they should be replaced immediately so they will always be available. The supplies listed herein are examples of materials which will serve approximately 20 casualties among each 100 employees. Additional supplies should be added in proportion to the total number of employees or to special conditions which might indicate that a higher percentage of employees might become casualties.

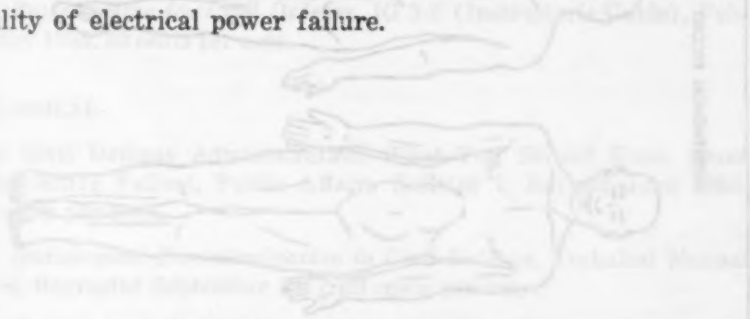
MINIMAL FIRST-AID SUPPLIES (FOR 100 EMPLOYEES)

	Number	Unit
Acetylsalicylic acid, 0.3 gm., 100's	1	each
Ammonia inhalant, aromatic, 1/3 cc. amp. 10's	3	pkgs.
Bandage, gauze, roller, 3" x 10 yds	12	each
Bandage, muslin, triangular, compressed 37" x 37" x 52"	8	each
Boric acid, ophthalmic ointment 5% 1/8 oz., in tube, 12's	1/12	pkg.
Dressing, first-aid, large (pad 11" sq.)	3	each
Dressing, first-aid, medium (pad 7½" x 8")	6	each
Dressing, first-aid, small (pad 4" x 7")	8	each
Pencil, lead, medium, with eraser	3	each
Pins, safety, large, 12's	3	card

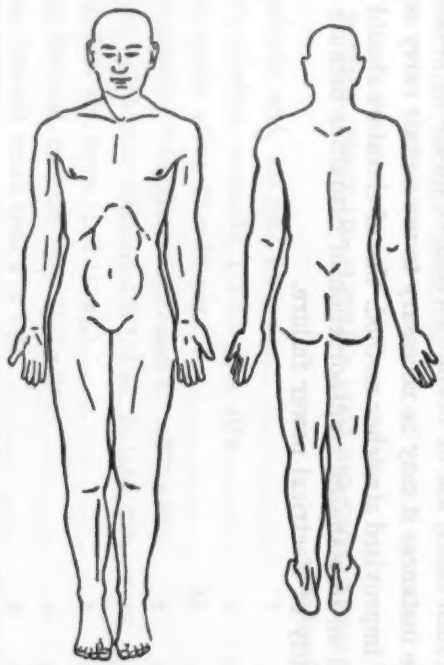
Plaster, adhesive, surgical, 3" x 5 yds.	3	spools
Pouch, canvas, with carrying strap or suitcase type of container	1 for each first-aider	each
Soap (hand)	6	bars
Scissors, bandage, Lister	3	each
Splints, basswood, size 2 (3/16" x 4" x 18")	6	each
Stretchers	4	each
Tourniquet, web, with buckle, ¾" to 1" wide x 32" long	3	each

Standard types of army stretchers, litter cots, or flexible stretchers are recommended. Another type of flexible stretcher can be readily made from 10 ounce weight canvas, 2 feet by 7½ feet webbing reinforced throughout with handloops at sides and at ends. Floor exits of a building, as well as stair wells, should be surveyed before any particular type of stretcher is selected. Elevators, stair wells, and doorways in many buildings will not accommodate the 90 inch by 22 inch standard stretcher.

In such cases, use of flexible stretchers should be emphasized. In some instances it may be necessary to use a chair carry or other type of improvised stretcher method. Use of elevators should not be counted on in planning transportation of casualties because of the possibility of electrical power failure.



SUPPLEMENTAL RECORD



BACK OF EMERGENCY MEDICAL TAG

EMERGENCY
MEDICAL TAG

Name and home address of casualty

Sex: Age:

Location when injured (describe exact location)

Found at (describe exact location)

Tagged: Date Hour

Type of injury and treatment (by first-aid worker)

Name of first-aid worker

Diagnosis and treatment at first-aid station

Sedation Dose: Hour:
Morphine Dose: Hour:

Disposition Date: Hour:

Symbol of station Signature—M. D.

(Binding Portion)

FACE OF EMERGENCY MEDICAL TAG
Two-part tag, interleaved with carbon and smudge sheets.

SELECTED REFERENCES

Since weapon capabilities constantly change, the following list of reference materials is limited, for the most part, to materials of recent date. Even so, later revisions and more recently issued publications should be sought and substituted when possible. References to earlier publications will be found in many of the publications listed.

National Industrial Conference Board, Inc. *Protecting Personnel in Wartime*, Studies in Business Policy No. 55, January 1952. National Industrial Conference Board, Inc., 460 Park Avenue, New York 17, N. Y. $4.00 per copy.

U. S. Department of Defense. *The Effects of Nuclear Weapons* (especially Chapter XI "Effects on Personnel" and Chapter XII "Protective Measures"), June 1957. Published by Atomic Energy Commission. Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. $2.00 per copy.

Federal Civil Defense Administration. Technical Bulletins and other publications may be obtained from local civil defense authority or Federal Civil Defense Administration, Battle Creek, Michigan, without charge. May be purchased from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at prices indicated.

.....*Basic Course for Civil Defense*, IG 3-2 (Instructor's Guide), February 1955. 30 cents per copy.

RADIOLOGICAL

Federal Civil Defense Administration. *What You Should Know about Radioactive Fallout*, Public Affairs Bulletin 7, Revised June 1956. 10 cents per copy.

.....*Radiological Decontamination in Civil Defense*, Technical Manual 11-6, Reprinted September 1957. 20 cents per copy.

.....*Shelter from Radioactive Fallout*, Technical Bulletin 5-2, Revised January 1956. 5 cents per copy.

.....*Emergency Exposures to Nuclear Radiation*, Technical Bulletin 11-1, Revised August 1956. 5 cents per copy.

FACE OF EMERGENCY MEDICAL TAG
Two-part tag, interleaved with carbon and smudge sheets.
BACK OF EMERGENCY MEDICAL TAG

.....*Emergency Measurement of Radioactivity in Food and Water,* Technical Bulletin 11-9, September 1955. 5 cents per copy.

.....*Radiological Instruments for Civil Defense,* Technical Bulletin 11-20, September 1955. 5 cents per copy.

.....*Fallout and the Winds,* Technical Bulletin 11-21, Revised February 1956. 5 cents per copy.

.....*Radiation Physics and Bomb Phenomenology,* Technical Bulletin 11-22, June 1956. 5 cents per copy.

BIOLOGICAL

Federal Civil Defense Administration. *What You Should Know about Biological Warfare,* Public Affairs Bulletin 2, February 1951. 10 cents per copy.

.....*Civil Defense against Biological Warfare,* Technical Manual 11-10, Reprinted February 1957. 20 cents per copy.

CHEMICAL

Federal Civil Defense Administration. *Introduction to Chemical Warfare,* Technical Bulletin 11-25, July 1956. 5 cents per copy.

.....*General Concepts of Chemical Warfare,* Technical Bulletin 11-26, July 1956. 5 cents per copy.

.....*Chemical Warfare Agents of Special Significance to Civil Defense,* Technical Bulletin 11-28, January 1957. 10 cents per copy.

.....*Chemical Agent Detector Kit, CD V-810,* Technical Bulletin 11-29, April 1957. 5 cents per copy.

MEDICAL

Federal Civil Defense Administration. *The First-Aid System,* Part I of *Organization and Operation of Civil Defense Casualty Services,* Technical Manual 11-1, January 1953. 25 cents per copy.

.....*Medical Records for Casualties,* Part III of *Organization and Operation of Civil Defense Casualty Services,* Technical Manual 11-3, March 1952 (Reprinted September 1957). 20 cents per copy.

.....*Emergency Medical Treatment,* Technical Manual 11-8, April 1953. 30 cents per copy.

PANIC CONTROL

Federal Civil Defense Administration. *The Problem of Panic,* Technical Bulletin 19-2, June 1955. 5 cents per copy.

American Psychiatric Association. *Psychological First Aid in Community Disasters,* 1954. American Psychiatric Association, 1785 Massachusetts Avenue, N. W., Washington 6, D. C. 35 cents per copy.

.....*Disaster Fatigue,* 1956. American Psychiatric Association, 1785 Massachusetts Avenue, N. W., Washington 6, D. C. 35 cents per copy.

(If both the above publications are purchased the combined price is 50 cents.)

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Booklet No. 3

CONTINUITY OF MANAGEMENT AND ALTERNATE HEADQUARTERS

1958

PREFACE

This booklet is the third in a series prepared for the guidance of the nation's banks. It presents one phase of an overall program for bank preparedness to minimize the effects of possible enemy attack. Other phases of the program are covered in related booklets. Collectively, the publications are designed to form a manual on emergency operations, suggesting measures which should be taken now to facilitate the stabilization of our economy following a serious assault.

The government, through the Office of Defense Mobilization, has called upon all industry to develop emergency plans. Because of the vital importance of the banking system to the whole economy of the country, this places a heavy responsibility on bankers. It is essential that they take immediate steps to assure the restoration of necessary operations and functions with a minimum of delay should there be a disruption in activities. It is believed that the principles and procedures presented in this and companion booklets will serve that objective.

In developing the material, the need for a considerable degree of flexibility was recognized. The following suggestions, which are quoted from the Introduction appearing in Booklet No. 1, are repeated by way of explanation:

> By necessity, defense planning will vary among banks. The size of the institution, its location, the number of banking offices, and the types of business predominating will influence the scope and emphasis of its plan. Many of the provisions described herein will be inappropriate and unnecessarily elaborate for the smaller banks. What would be feasible, even necessary, for a large metropolitan bank may not be suited at all to the needs of its distant correspondent. It is not expected that these smaller banks should plan for extensive internal organizations along the lines of those desirable for larger institutions; nevertheless, the fundamental principles set forth herein are

applicable to all banks and can be beneficial to them, even the smallest. The important consideration is that each bank should have some sort of plan, tailored to suit its own particular problems, policies, and financial situation . . . Detailed planning for the carrying out of essential functions is left generally to the individual banks. Uniformity of approach in the handling of particular operations is desirable, however, and to that end, the planning in appropriate areas should be developed at the clearinghouse or regional level.

In many areas of planning, it will be advisable, and even necessary, to consult with neighboring banks and local civil defense officials. The importance of avoiding possible conflict with civil defense plans is axiomatic. Wherever possible, therefore, coordination should be a basic consideration. Banks also are urged to get their programs in motion promptly. Again, to quote from the Introduction of Booklet No. 1:

It is recognized that future developments in all probability will necessitate revisions in the various aspects of emergency planning, and it is inherent in the nature of such planning that it be kept fluid. However, it does not necessarily follow that future developments will complicate plans already in existence. National security and self-interest point to the need for immediate planning; and, even though some uncertainties exist, it seems essential, therefore, for banks to complete their programs promptly, rather than to delay action in the hope that the resolution of some of these uncertainties will make planning easier at some future date.

ADVISORY COMMITTEE ON COMMERCIAL BANK PREPAREDNESS
JOHN J. MCCLOY, *Chairman*

BANKING COMMITTEE ON EMERGENCY OPERATIONS
G. EDWARD COOPER, *Chairman*

CONTINUITY OF MANAGEMENT AND ALTERNATE HEADQUARTERS

Prudence dictates that bank management make the necessary preparations to be in a position to resume business promptly following a destructive enemy attack. This poses some problems of a legal as well as a physical nature. Do the present by-laws enable surviving directors and officers to take official action? Who could function in the emergency period if a quorum of directors was not available? Has provision been made for the succession of key executive, administrative, and operating personnel? Should arrangements be made for alternate headquarters? These are some of the questions which confront management in planning for continuity of operations.

As a first step in this phase of the program, advance corporate action will be necessary. Corporate by-laws must be reviewed and amended, or appropriate resolutions adopted, to provide for a reconstitution of the board or substitute governing body; for the empowering of successor executives; and for the designation of alternate headquarters. Sample by-laws and resolutions covering these matters are included in the Appendix of this booklet.[1]

The manner of filling director vacancies, the designation of temporary headquarters, and other limitations or expansion of activities during a period of emergency are matters generally within the scope of the statutes and should be reviewed by a bank's attorneys. The suggested forms of by-laws and resolutions shown herein consequently are intended merely as guides, subject to modification

[1] Some variance in terminology will be discerned in reviewing these samples, for example, the precise definition of what is to be considered an "emergency." Since most of the exhibits represent forms actually in use by banks, there has been no attempt to provide for uniformity of terminology.

by bank counsel and management in accordance with circumstances and policies in each particular case.

However, it is understood that stand-by banking orders and regulations, which have been prepared for issuance in the event of a national war emergency, will permit banking institutions, including the Federal Reserve banks, national banks, and state-chartered banks—nonmember as well as member—to take actions necessary during such an emergency without regard to some of the normal peacetime requirements and restrictions. (For example, banking institutions might find it necessary to set up substitute banking quarters beyond the limits of established banking districts.) Moreover, such banking institutions, their directors, officers, and employees will not be subject to liability on account of such actions taken (other than the assumption of contractual obligations) or omitted to be taken, in good faith, pursuant to such emergency orders or regulations, notwithstanding any other provision of law.

CONTINUITY OF MANAGEMENT

It behooves management to plan for its own continuity. Following a serious assault, with many of the key executives lost and the banking quarters in ruins, it is possible that a quorum of directors could not be assembled and that an early stockholders' meeting might be out of the question. Leadership needed for reconstruction of the organization might be virtually nonexistent. In such a situation, a well-organized continuity plan should assure as far as possible a reconstitution of authority with a minimum of confusion and delay.

DIRECTOR VACANCIES

Recognizing that it might be difficult or impossible under normal procedure to reconstitute the board of directors for months, banks should consider the adoption of an appropriate special by-law to carry them through any such period.

Because of the provisions of U.S.R.S. 5145 and 5148 concerning the boards of directors of national banks, and the possibility that a quorum as provided by the bank's Articles of Association might not be available in an emergency, the Office of the Comptroller of the Currency has suggested an emergency by-law in the form shown in Exhibit I on page 19 for incorporation, under a heading such as "Emergencies," in the General Form of By-Laws of National Banks immediately preceding the last section.

Some state-chartered banks have more latitude in making provision for emergency board of directors' action. Subject to the provisions of the laws of their several states, some state-chartered banks may therefore wish to make use of their executive committees

by the adoption of an emergency by-law such as that shown in Exhibit II on page 19. Other state-chartered institutions may prefer a more elastic measure, such as a by-law providing for the adoption of resolutions authorizing certain persons to exercise authority on behalf of the bank which would be applicable in a time of emergency, notwithstanding any contrary by-law provision. To guard against all conceivable hazards, including the possibility that the entire board of directors might be lost by reason of a surprise attack during a meeting or the death of individual members elsewhere, state-chartered institutions might well give consideration to supplementing any emergency by-law that requires for its effectiveness the survival of some directors by also adopting an emergency by-law in the form shown in Exhibit I.

EXECUTIVE SUCCESSION

Following an attack, a predetermined management succession list would reduce uncertainty as to the desires and intentions of the board of directors. All of the Federal Reserve banks and some commercial banks, by action of their directors, have adopted succession lists or other emergency succession plans for their chief executives. Names on the chief executive list might include designated active officers, directors, and advisory committee members; designated former officers, directors, and advisory committee members; and perhaps, in special cases, attorneys, officers of other banks, and qualified business men.

In formulating a succession plan, the planners should appraise the vulnerability of their key executives and personnel from the standpoint of both location and depth of the organization. In some large branch systems, the executive forces may be well dispersed; similarly, qualified replacement personnel might stand two or three deep for each key position as a result of executive development programs. Small unit banks may not be so fortunate in this respect. To the extent possible, each bank should endeavor to assure that all the managerial skill and know-how would not be completely lost by

including in each succession list some persons whose work and residence would suggest the probability of their survival.

Persons on the succession list may be informed of that fact and made familiar with the general plan for reconstructing bank records, giving emergency banking service to customers, extending credit, and re-establishing facilities. Although not necessarily given the order of succession, they may be instructed that in case of destruction of the head office by enemy action, they should proceed by any means available to the designated alternate head office.

One plan is to provide that, at the relocation point, the person whose name appears highest on the succession list takes command until someone whose name is nearer the top arrives and supersedes him or until his authority is terminated by appropriate action under the terms of the officer succession resolution or by postattack action by the board of directors.

An alternate plan, followed by some banks, is to limit the names on the succession list to those of present (or former) chief executive officers and to provide through an appropriate resolution a method of selecting a chief executive officer if the persons previously named cannot be located or are unable to assume or to continue normal executive duties. In this type of plan, the resolution might provide, for example, that all of the officers above a specified rank who are then present at the acting head office may designate as chief executive officer either (1) one of those present, or (2) a director (or former director) of the bank who can be located and is able to assume executive duties at the then acting head office.

Copies of the resolution containing the succession list, properly certified under seal by the secretary, should be filed in a sufficient number of places in different localities to afford reasonable assurance that at least one properly attested copy would be available to the surviving or the emergency management. In addition to the head office vault and the contemplated alternate head office, such locations might include correspondent banks and the district Federal Reserve bank. These certified copies should be filed in sealed envelopes to be delivered unopened in accordance with instructions set

forth on the envelopes. Signature cards or circulars containing specimens of the signatures of persons, in addition to surviving management, authorized to transact the business of the bank in an emergency, with titles, if feasible, may be filed with the resolutions or in separate sealed envelopes. Under the latter plan, such envelopes should contain on their face a statement of their contents, together with instructions that they are to be opened upon the happening of the emergency.

A sample form of resolution providing for officer succession appears as Exhibit III on page 20.

Banks without distant branches should explore the possibilities of an understanding with one or more correspondent banks in other areas to render assistance by furnishing personnel in time of emergency; that is, in the event one institution was badly stricken as a result of enemy attack, its counterpart by previous agreement would supply certain key manpower at the top level to aid the stricken bank in getting back into operation at an alternate location, if necessary. Other possible arrangements may suggest themselves to those formulating the plans. Since there is no way of knowing in advance who might survive an attack, steps should be taken by each bank, to the degree possible, to assure the availability of personnel having the necessary authority to cope with extreme emergencies.

ALTERNATE HEADQUARTERS

Each bank should consider the need for an alternate headquarters or emergency relocation office, that is, an office from which management can function during an emergency. In making the necessary arrangements, several possibilities are open to the individual bank, including:

1. An arrangement for an alternate office in a distant point, contracting for available space or utilizing the facilities of an outside organization.
2. An understanding with one or more correspondent banks in other areas to make available temporary space as an alternate office.
3. The designation of a distant branch or branches as substitute head offices.

While the course of action chosen by a particular institution will depend upon a number of factors, it is important that in planning for temporary quarters there be considered what might be required from the standpoints of advance corporate action, location, equipment and supplies, records storage, vault facilities, and personnel.

An adequate alternate location need not attempt to duplicate, even in a small way, all of the facilities of a peacetime banking office. An elaborate installation or stockpiling of stand-by equipment at relocation offices might be considered extravagant as well as undesirable. During an emergency, many operations may not be performed at all; operations normally mechanized might be manually performed; and pooling arrangements providing for the centralization of equipment and supplies might be prudent. Advance planning in this as in other areas is a matter to be decided by individual banks. The importance of establishing some sort of alternate

headquarters is re-emphasized, however, since it is apparent that the efforts of the surviving management would be impeded greatly if it had no previously designated rendezvous point or relocation office.

CORPORATE ACTION

Corporate by-laws which have not been amended to permit banks to temporarily change the location of their banking offices could raise troublesome legal problems. A sample by-law to provide for a location to be fixed is shown as Exhibit IV on page 22. For branch banking systems, Exhibit V on page 22 suggests a form of resolution to specify the order in which several branch offices shall successively become the post-emergency head office.

LOCATION

It is not possible to set down any specific recommendations as to the geographic location of alternate headquarters. Generally, the site selected should be far enough away from the present main banking office to minimize the possibility of both being destroyed in the same attack, yet advantageously situated from the standpoints of mail service and accessibility. The latter considerations are particularly important should it be decided to maintain a small peacetime staff on the premises. Factors which should be taken into consideration in selecting the relocation site include:

1. Accessibility to contemplated operating personnel
2. Availability of living and working quarters
3. Transportation and communication facilities
4. Proximity to another bank
5. Avoidance of proximity to military posts or potential strategic targets.

A bank, seeking, in the location of its alternate headquarters, to avoid proximity to military installations or to population and industry concentrations that would make the location a potential

target area, may obtain guidance and assistance by indicating the proposed relocation site, or sites, on a map (an ordinary road map will suffice) and sending the marked map to: Industrial Location Division, Office of Area Development, U. S. Department of Commerce, Washington 25, D. C. The probability of radioactive fallout should also be investigated through the civil defense authorities in the locality under consideration.[2]

In the case of large commercial banks located in the same cities as Federal Reserve offices, there is still another factor to be taken into consideration, namely, the relocation site or alternate office of the Federal Reserve bank, since the collection of cash and noncash items, during a period of emergency, would be facilitated if it proves practicable for such commercial banks to plan the locations of their alternate headquarters in such a way as to permit the continuation of clearinghouse operations.

EQUIPMENT AND SUPPLIES

The surviving management would be seriously handicapped if furniture; simple office equipment, such as adding machines and typewriters; and incidental supplies were not on hand at the alternate headquarters. Banks that have items of equipment which are not in daily use, even though obsolete or in need of repair, might consider the advisability of having them put in workable condition and transferred to the relocation office. Sources of equipment during an emergency might be explored, although it seems likely that the demand under such conditions would far exceed the capacity of suppliers to deliver. There is the possibility, however, that reasonable quantities of needed items might be made available in the emergency by other organizations, for example, a nearby educational institution.

Bank forms for use in an emergency should be kept at the alternate office. Whether stocks of forms or merely a set of samples

[2] See *Probability of Fallout Debris Deposition*, Technical Bulletin 11-31, Federal Civil Defense Administration, Battle Creek, Michigan, June 1957.

is maintained is a matter to be decided by the individual bank. It is also advisable to send to the relocation office a sufficient quantity of operating manuals or other written instructions describing those operations which will be performed at these locations.

RECORDS STORAGE

Many banks will select an alternate headquarters that also can serve as the storage point for records duplicated or reproduced as described in forthcoming Booklet No. 5 *Duplicate or Alternate Records*. Others may consider it desirable to provide for a records storage center at a point other than at the relocation office. Commercial underground records storage vaults have been constructed in some parts of the country in which space is available for rent by those who do not wish to establish their own records storage centers. The locations of these storage facilities, which are maintained by private organizations, can be found by making inquiry through the offices of the American Bankers Association or the Federal Civil Defense Administration.

If the alternate headquarters is to house duplicate records under the program for the protection of assets and records, instruction for record reconstruction should be filed there. Materials, machinery, and equipment for reconstruction also should be available at the records depository as these items may be impossible to obtain following a major disaster. Physical requirements and equipment for record protection are described in forthcoming Booklet No. 4 *Physical Properties*.

VAULT FACILITIES

It is not essential to have vault facilities at relocation offices, but, where feasible, arrangements may be made with nearby banks for the use of limited vault space during an emergency. It also would be desirable to have at the relocation site a book vault or safe where minor amounts of cash and other valuables could be stored.

PERSONNEL

Without at least a small segment of the working force available, it is easy to see how difficult it would be to cope with rehabilitation problems—how many days, weeks, even months might be lost in the effort to re-establish operations. In the formulation of plans, consideration must be given to mobilizing the aid of all present employees, as well as former employees and others who might be available for recruitment. All should be informed in advance regarding the specific duties which they would be expected to carry on during an emergency.

It must be recognized that immediate and primary dependence cannot be placed upon those connected with an office which might be destroyed. Those fortunate enough to escape cannot be expected to report for duty until they have assured themselves of the safety and welfare of their families. Availability of such personnel will depend on the extent of the damaged area and the surrounding circumstances.

It may be advisable to establish one or more rendezvous points or information centers where employees could go for instructions following an attack. Such points should be selected which might be presumed to be outside the area of destruction and all persons who are available for recruitment should be provided with reasonably detailed instructions as to the manner of proceeding to these locations. Other banks located within a reasonable distance, yet removed from population and industry concentrations, would seem to offer attractive possibilities as such rendezvous points. The person in charge of personnel at the relocation office, of course, would be expected to keep in touch with these centers.

All employees should be provided with some means of identification to facilitate their movements in the destroyed office area. In those instances where rendezvous points have been set up, some type of identification cards or transportation passes in blank might be maintained at these rendezvous points in order that those persons who made their way there could be provided with some evidence of

authority to aid them in reaching the relocation office. In this connection, it should be remembered that some aspects of transportation and related problems will be controlled by local civil defense authorities. Those in charge of preparedness planning in banks, therefore, should keep in touch with them concerning matters of this nature.

Relocation offices should be self-sustaining, that is, not dependent upon instructions from personnel of disrupted offices. The larger institutions will find it advisable to prepare and keep current emergency personnel qualifications records, showing the name, address, and telephone number of the individual and his emergency alternate, if designated. A duplicate of this information should be retained in the alternate headquarters to aid in emergency mobilization of employee resources.

Large banks, particularly those having a number of branches, may organize task forces comprising staff members who live or normally are located outside of target areas. Duties should be assigned to those persons so that advance thinking and planning may be done by the individuals who would have post-emergency responsibilities. All phases of operations may be so assigned. With this advance planning and allocation of responsibilities, in the event of an attack, the alternate head office might begin functioning almost immediately.

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APPENDIX

Note: It is contemplated that the samples on the following pages will be used only as guides to be modified by the bank's attorneys and bank management to satisfy the circumstances under which the particular bank may be operating.

EXHIBIT I

Sample By-Law to Provide for Emergency Operations by Surviving Staff

EMERGENCIES

Sec. ____. In the event of an emergency declared by the President of the United States or the person performing his functions, the officers and employees of this bank will continue to conduct the affairs of the bank under such guidance from the directors as may be available except as to matters which by statute require specific approval of the board of directors and subject to conformance with any governmental directives during the emergency.

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EXHIBIT II

Sample By-Law to Provide for Emergency Operations through Executive Committee Action

OFFICERS PRO TEMPORE AND DISASTER

Section 1. The board of directors shall have the power, in the absence or disability of any officer, or upon the refusal of any officer to act, to delegate and prescribe such officer's powers and duties to any other officer, or to any director, for the time being.

Section 2. In the event of a state of disaster of sufficient severity to prevent the conduct and management of the affairs and business of this bank by its directors and officers as contemplated by these By-Laws, any two or

more available members of the then incumbent executive committee shall constitute a quorum of that committee for the full conduct and management of the affairs and business of the bank in accordance with the provisions of Article _____ of these By-Laws; and in addition, such committee shall be empowered to exercise all of the powers reserved to the trust committee under Article _____ hereof. In the event of the unavailability, at such time, of a minimum of two members of the then incumbent executive committee, any three available directors shall constitute the executive committee for the full conduct and management of the affairs and business of the bank in accordance with the foregoing provisions of this section. This By-Law shall be subject to implementation by resolutions of the board of directors passed from time to time for that purpose, and any provisions of these By-Laws (other than this section) and any resolutions which are contrary to the provisions of this section or to the provisions of any such implementary resolutions shall be suspended until it shall be determined by any interim executive committee acting under this section that it shall be to the advantage of this bank to resume the conduct and management of its affairs and business under all of the other provisions of these By-Laws.

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EXHIBIT III

Sample Resolution to Provide for Officer Succession

Be It Resolved, that if consequent upon war or warlike damage or disaster, the president of this bank cannot be located by the then acting Head Office or is unable to assume or to continue normal executive duties, then the authority and duties of the president shall, without further action of the board of directors, be automatically assumed by one of the following persons in the order designated:

A LIST OF NAMES IN ORDER OF SUCCESSION IS SHOWN IN THE OFFICIAL MINUTES OF THE BANK AND IN THE CERTIFIED COPIES WHICH ARE UNDER SEAL IN VARIOUS DEPOSITORIES.

Any one of the above persons who in accordance with this resolution assumes the authority and duties of the president shall continue to serve until he resigns or until five-sixths of the other officers who are attached to the then acting Head Office decide in writing he is unable to perform said duties or until the elected president of this bank, or a person higher

on the above list, shall become available to perform the duties of president of the bank.[1]

Be It Further Resolved, that if consequent upon war or warlike damage or disaster, the cashier of this bank cannot be located by the then acting Head Office or is unable to assume or to continue normal executive duties, then the authority and duties of the cashier shall, without further action by the board of directors, be automatically assumed by one of the following persons in the order designated:

A LIST OF NAMES IN ORDER OF SUCCESSION IS SHOWN IN THE OFFICIAL MINUTES OF THE BANK AND IN THE CERTIFIED COPIES WHICH ARE UNDER SEAL IN VARIOUS DEPOSITORIES.

The person assuming the authority and duties of cashier in accordance with this resolution shall serve until:

(a) The elected cashier or person whose name is higher on the above list shall be able to function as cashier, or

(b) Until he resigns or is unable as determined by the acting president to perform the duties of his office.

In the case of (b), the next eligible and available person on the above list shall assume the authority and duties of the cashier.

Be It Further Resolved, that anyone dealing with this bank may accept a certification by any three officers that a specified individual is acting as president or that a specified individual is acting as cashier in accordance with this resolution; and that anyone accepting such certification may continue to consider it in force until notified in writing of a change, said notice of change to carry the signatures of three officers of the bank.[2]

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[1] Note: The provision for replacing the acting president is suggested because of the possibility that an individual might be so seriously impaired by physical or mental shock as to be incapable of fulfilling the duties required of him. Presumably the only group that could sense this situation and would be available would be the other officers who are on duty at the acting Head Office. The fraction five-sixths has been used so that such removal could not be made lightly. Some banks may prefer a different fraction; some may wish to spell out more specifically which officers can enter into making such a removal decision.

[2] Note: The provision that anyone dealing with the bank may accept a certification by any three officers is included as a protective measure for customers. Otherwise, there might be difficulty in the acting president or acting cashier having his authority recognized by outsiders.

EXHIBIT IV

Sample By-Law to Provide for Alternate Locations

OFFICES

Sec. ____. The offices of the bank at which its business shall be conducted shall be the main office thereof located at _____ Street, _____, _____, (and branches, if any), and any other legally authorized location which may be leased or acquired by this bank to carry on its business. During an emergency resulting in any authorized place of business of this bank being unable to function, the business ordinarily conducted at such location shall be relocated elsewhere in suitable quarters, in addition to or in lieu of the locations heretofore mentioned, as may be designated by the board of directors or by the executive committee or by such persons as are then, in accordance with resolutions adopted from time to time by the board of directors dealing with the exercise of authority in the time of such emergency, conducting the affairs of this bank. Any temporarily relocated place of business of this bank shall be returned to its legally authorized location as soon as practicable and such temporary place of business shall then be discontinued.

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EXHIBIT V

Sample Resolution to Provide for Acting Head Offices

Be It Resolved, that in case of and provided because of war or warlike damage or disaster, the (Head) Office of this bank is unable temporarily to continue its functions, _____ Branch, located in _____, shall automatically and without further action of this board of directors, become the "Acting Head Office of this Bank";

Be It Further Resolved, that if by reason of said war or warlike damage or disaster, both the (Head) Office of this bank and the said _____ Branch of this bank are unable to carry on their functions, then and in such case, the _____ Branch of this bank, located in _____, shall, without further action of this board of directors, become the "Acting Head Office of this Bank"; and if neither _____ Branch nor _____ Branch can carry on their functions, then the _____ Branch of this bank, located in _____, shall, without further action of this board of directors, become the "Acting Head Office of this Bank." The Head Office shall resume its functions at its legally authorized location as soon as practicable.

SELECTED REFERENCES

Since weapon capabilities constantly change, the following list of reference materials is limited, for the most part, to materials of recent date. Even so, later revisions and more recently issued publications should be sought and substituted when possible. References to earlier publications will be found in many of the publications listed.

Federal Civil Defense Administration. Technical Bulletins and other publications may be obtained from local civil defense authority or Federal Civil Defense Administration, Battle Creek, Michigan, without charge. May be purchased from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at prices indicated.

.....*Industry Defense Check List* (Section X), Technical Bulletin 16-4, April 1956. 15 cents per copy.

.....*Identification of Civilian and Military Personnel in a Civil Defense Emergency or a Natural Disaster*, Advisory Bulletin 197, February 23, 1956. No charge indicated.

.....*Probability of Fallout Debris Deposition*, Technical Bulletin 11-31, June 1957. 25 cents per copy.

Office of Defense Mobilization. *Dispersion and Protective Construction—Policy, Criteria, Responsibilities*, Defense Mobilization Order I-19, January 11, 1956. Office of Defense Mobilization, Washington 25, D. C. No charge indicated.

U. S. Department of Commerce. *The National Industrial Dispersion Program*, March 1957. Industrial Location Division, Office of Area Development, U. S. Department of Commerce, Washington 25, D. C. No charge indicated.

Booklet No. 4

PHYSICAL PROPERTIES

PREFACE

This booklet is the fourth in a series prepared for the guidance of the nation's banks. It presents one phase of an overall program for bank preparedness to minimize the effects of possible enemy attack. Other phases of the program are covered in related booklets. Collectively, the publications are designed to form a manual on emergency operations, suggesting measures which should be taken now to facilitate the stabilization of our economy following a serious assault.

The government, through the Office of Defense Mobilization, has called upon all industry to develop emergency plans. Because of the vital importance of the banking system to the whole economy of the country, this places a heavy responsibility on bankers. It is essential that they take immediate steps to assure the restoration of necessary operations and functions with a minimum of delay should there be a disruption in activities. It is believed that the principles and procedures presented in this and companion booklets will serve that objective.

In developing the material, the need for a considerable degree of flexibility was recognized. The following suggestions, which are quoted from the Introduction appearing in Booklet No. 1, are repeated by way of explanation:

> By necessity, defense planning will vary among banks. The size of the institution, its location, the number of banking offices, and the types of business predominating will influence the scope and emphasis of its plan. Many of the provisions described herein will be inappropriate and unnecessarily elaborate for the smaller banks. What would be feasible, even necessary, for a large metropolitan bank may not be suited at all to the needs of its distant correspondent. It is not expected that these smaller banks should plan for extensive internal organizations along the lines of those desirable for larger institutions; nevertheless, the fundamental principles set forth herein are applica-

ble to all banks and can be beneficial to them, even the smallest. The important consideration is that each bank should have some sort of plan, tailored to suit its own particular problems, policies, and financial situation . . . Detailed planning for the carrying out of essential functions is left generally to the individual banks. Uniformity of approach in the handling of particular operations is desirable, however, and to that end, the planning in appropriate areas should be developed at the clearinghouse or regional level.

In many areas of planning, it will be advisable, and even necessary, to consult with neighboring banks and local civil defense officials. The importance of avoiding possible conflict with civil defense plans is axiomatic. Wherever possible, therefore, coordination should be a basic consideration. Banks also are urged to get their programs in motion promptly. Again, to quote from the Introduction of Booklet No. 1:

It is recognized that future developments in all probability will necessitate revisions in the various aspects of emergency planning, and it is inherent in the nature of such planning that it be kept fluid. However, it does not necessarily follow that future developments will complicate plans already in existence. National security and self-interest point to the need for immediate planning; and, even though some uncertainties exist, it seems essential, therefore, for banks to complete their programs promptly, rather than to delay action in the hope that the resolution of some of these uncertainties will make planning easier at some future date.

ADVISORY COMMITTEE ON COMMERCIAL BANK PREPAREDNESS
JOHN J. MCCLOY, *Chairman*

BANKING COMMITTEE ON EMERGENCY OPERATIONS
G. EDWARD COOPER, *Chairman*

PHYSICAL PROPERTIES

In planning for the preservation of a bank's physical assets, including original and duplicate records, work in progress, cash, securities, collateral documents, etc., the protection which its buildings, vaults, and outside storage facilities or relocation sites afford is of paramount importance. Not only are the buildings themselves important, but the day-to-day operating and housekeeping procedures and the storage requirements available inside the facilities can be significant factors in a bank's ability to reconstruct and ultimately resume business after any type of disaster.

BUILDINGS

Determination of the vulnerability of a bank building to damage from blast, fire, heat, and radiation is important from the standpoint of the protection of both the bank's personnel and the bank's records. The need for flexibility in any approach to the selection of shelter areas and the analysis of building structures and methods of improving their resistance to effects of damage from nuclear explosion cannot be overemphasized. Criteria in these particular fields are undergoing continual study and evaluation by specialists. Federal Civil Defense Administration and other government publications, which are prepared on the basis of technical knowledge developed in the testing of weapons both of the "fission type" and of the "fusion type" including both those in the kiloton (equivalent to 1,000 tons of TNT) and those in the megaton (equivalent to 1,000,000 tons of TNT) range, are available through the FCDA or the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.[1]

[1] See U. S. Department of Defense, Atomic Energy Commission, *The Effects of Nuclear Weapons*, Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., June 1957.

Inquiry of local civil defense authorities concerning the latest material available is suggested, since it is understood that FCDA Technical Manuals, which treat with the complete subject of analyzing building structures and methods of improving their resistance to effects of damage from atomic bombing, are currently the subjects of revision.

Bank building structures, including those to be used as alternate headquarters or relocation sites, can be analyzed and shelter areas selected by methods laid down in publications available from the sources mentioned. Suggestions for the correction of deficiencies and improvement of certain structures to afford maximum protection are also contained in such publications. It is possible through the application of these analytical methods and the making of indicated improvements, as well as shielding from radiological fallout effects, to put a building in a condition to have the maximum ability to withstand a bombing with survival that would enable resumption of operations.

VAULTS

While building structures vary considerably, bank vaults generally follow a similar pattern with regard to both structure and utility; consequently, it is possible to make some general observations concerning their ability to survive an atomic blast. The following such observations appear in a report prepared by Ammann & Whitney, who are consulting engineers, designers of shelters, etc., for the Federal Civil Defense Administration:

In any program of protection against nuclear explosions it must be recognized that absolute protection cannot be provided, unless the size of the bomb and the location of burst (ground zero) can be accurately determined. This is not possible without making important assumptions of doubtful validity. For example, although the program could be based on the largest presently available bomb, there is, to our knowledge, no known technical limitation on future bombs. It is of interest to note that the atomic bomb dropped at Hiroshima, Japan, had an energy equivalent of 20,000 tons or 20 kilotons of TNT high explosive. At the present time, thermonuclear bombs with TNT equivalents in millions of tons or megatons have

been tested by both the United States and Russia. The original 20 kiloton bomb had a destructive radius of about two miles. Currently, discussion centers on bombs capable of creating a crater a mile in diameter and of producing destructive pressures more than 20 miles from the point of explosion.

Vaults usually are of heavy reinforced concrete construction although the reinforcement may not be so placed to provide maximum protection against blast loads. Nevertheless, vaults are much stronger than most conventional building structures and can be depended upon to remain intact at distances from ground zero where most other buildings would be either completely demolished or badly damaged.

It is possible to provide additional strength to existing vault structures, particularly through roof reinforcement. The report prepared by Ammann & Whitney says this on that subject:

> Such strengthening can be accomplished by the addition of columns in wide vaults and by prestressing or addition of steel framing in the narrow vaults. Any further increase in strength could be accomplished only at a relatively high cost. Steel plate linings cannot be considered to provide additional protection unless welded.

Even though a vault apparently may remain intact following a nuclear blast, the contents may be damaged by fire, heat or flood waters. In a well-constructed vault, it seems likely that the contents will not be damaged by fire, although the structure may be inaccessible for a lengthy period. On the other hand, possible water damage is a hazard which cannot be treated lightly, particularly where vaults are situated below street level or in cases where pumping may presently be necessary at certain times to keep vault areas dry. Since outside power sources probably will be destroyed by nuclear blasts and may remain inoperative for an extended period of time, stand-by, self-contained, automatic-starting pumping equipment merits consideration. The installation of additional waterproofing materials also may be helpful in preventing water damage to the vault contents.

Banks considering the possibility of providing additional pro-

tection through construction of new blast resistant vaults are offered the following suggestions, which are quoted from the same Ammann & Whitney report:

> Underground vaults in rock will provide maximum protection and are feasible in many parts of the country where rock is close to the ground surface. Vaults in conventional locations can be made considerably more blast resistant with relatively inexpensive design changes. Such new vaults could serve as depositories for the vital records of several branch offices in any given area. If an arrangement of this type can be made compatible with bank operations, a smaller number of highly blast resistant vaults, properly located, would greatly reduce the vulnerability of the entire system of vaults.

RECORDS AND ASSETS PROTECTION

Many vital records and valuable assets, such as currency, securities, collateral, and documents, of course, cannot be stored at distant points. Every precaution should be taken to protect them to the greatest possible extent on bank premises both during and after business hours. It is axiomatic that they be placed in vaults overnight. Personnel should be trained in the steps to be taken for the protection of working records in the event of an alert signal.

Put-away procedures should be developed in the various areas of the bank, with the objective of providing the maximum safety for the bank's assets and vital records. To facilitate such prompt action, the bank should operate with a minimum exposure to cash and securities outside the vault. Working inventories should be as small as practicable and large new receipts and all finished work should be placed in the vault at intervals during the day. While this means more trips in and out of the vault, it makes emergency put-away much easier at a greatly reduced risk.

Each department or segment of the bank should be analyzed and put-away procedures established which will best meet the needs of that particular unit. In developing these procedures it will become evident that all assets and records cannot be placed in the vault under emergency conditions. Other depositories of varying degrees of safety such as safes, file cabinets, storage closets, metal or

corrugated boxes, and even desk drawers may have to be utilized. Certain members of the staff may need to be supplied with boxes, bags or other containers for the material so that it may be placed quickly in convenient vaults, safes, cabinets or other available protective places. It has been determined by tests made by the National Records Management Council for the Federal Civil Defense Administration in conjunction with nuclear test explosions that the durability of various types of records storage equipment and the material contained in the equipment depends upon the size and the distance of the burst and the position of the equipment and the shielding afforded it in various types of structures.

It has been all too conclusively demonstrated that establishments outside the immediate target area of a nuclear explosion will have to contend with fires started by thermal radiation or by crossed wires, wrecked furnaces, etc. There may be floods due to destruction of dams and reservoirs and to broken mains, as well as damage from water used to extinguish fires. An article entitled "Protect Your Records Against Disaster"[2] deals in detail with the relative destructive effects of nuclear explosion, fire, and flood on records and storage equipment and provides valuable information on records protection and storage.

RECORDS STORAGE CENTERS

To enable a bank to continue or resume business after a disaster, a program for the storage of essential bank records in a remote rural area, which is likely to be free from attack damage, is a necessity.

As stated in Booklet No. 3, many banks will select an alternate headquarters that can also serve as the records storage center. Others may consider it desirable to provide for a records storage center at a point other than the relocation office. Some banks have utilized

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[2] Robert A. Shiff, "Protect Your Records Against Disaster," *Harvard Business Review*, Boston, Massachusetts, July-August 1956 (Reprint). Available through local civil defense authority.

facilities at a correspondent bank or some other bank in a remote rural area which is likely to be free from attack. Some have used a branch office for records storage. Others have built specially designed records storage facilities. In any case, the physical arrangements and equipment for protection and reproduction of the stored records are important.

Commercial underground records storage vaults have been constructed in some parts of the country in which space is available for rent by those who do not wish to establish their own records storage centers. The locations of these storage facilities, which are maintained by private organizations, can be found by making inquiry through the offices of the American Bankers Association or the Federal Civil Defense Administration. In some of these it is possible to contract in advance for post-disaster reproduction of microfilmed records in usable paper form.[3]

The spot chosen for the records storage center should be far enough away from the main banking office to minimize the possibility of both being destroyed by the same disaster, yet advantageously situated from the standpoints of communications and accessibility. In its selection, the same factors mentioned in connection with the geographic location of alternate headquarters or relocation sites should be taken into consideration, namely, the avoidance of proximity to military installations or to population and industry concentrations that would make the location a potential target area. Guidance and assistance in this may be obtained by indicating the proposed records storage center site or sites on a map (an ordinary road map will suffice) and sending the marked map to Industrial Location Division, Office of Area Development, U. S. Department of Commerce, Washington 25, D. C.

Protective construction features can be utilized when there are impelling reasons to locate the records storage center nearer a potential target than would otherwise be prudent. As in the case of bank buildings, specific information on construction standards for protec-

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[3] See *A Comprehensive Security Program for Vital Corporate Records*, Recordak Corporation, New York, N. Y., 1956.

tion against blast and shock, thermal radiation, initial radiation, and residual nuclear radiation is available from the Federal Civil Defense Administration which is constantly engaged in developing and revising criteria for such protective construction. When specially designed facilities are constructed, abandoned mines and quarries, such as are used by a number of commercial records storage companies, offer advantageous possibilities.[4] In general, the better and more remote the location, the less need there is for protective construction, except for shielding against radioactive fallout which the winds prevailing at a given time might deposit on almost any location in the country.

Information concerning the protective effects of different kinds of storage equipment which might be used within the records storage center is available in numerous publications, including the article, "Protect Your Records Against Disaster," referred to previously.[5]

Only physical requirements for the storage of records are considered in this booklet; the selection, duplication, and reconstruction of essential records is the subject of forthcoming Booklet No. 5, *Duplicate or Alternate Records.*

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[4] See U. S. Department of Defense, Office of Chief of Engineers, U. S. Army, *Underground Plants for Industry,* Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., January 1956.

[5] See also *Protecting Records in Wartime,* Studies in Business Policy No. 51, National Industrial Conference Board, Inc., New York, N. Y., April 1951.

SELECTED REFERENCES

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Booklet No. 5

DUPLICATE OR ALTERNATE RECORDS

PREFACE

This booklet is the fifth in a series prepared for the guidance of the nation's banks. It presents one phase of an overall program for bank preparedness to minimize the effects of possible enemy attack. Other phases of the program are covered in related booklets. Collectively, the publications are designed to form a manual on emergency operations, suggesting measures which should be taken now to facilitate the stabilization of our economy following a serious assault.

The government, through the Office of Defense Mobilization, has called upon all industry to develop emergency plans. Because of the vital importance of the banking system to the whole economy of the country, this places a heavy responsibility on bankers. It is essential that they take immediate steps to assure the restoration of necessary operations and functions with a minimum of delay should there be a disruption in activities. It is believed that the principles and procedures presented in this and companion booklets will serve that objective.

In developing the material, the need for a considerable degree of flexibility was recognized. The following suggestions, which are quoted from the Introduction appearing in Booklet No. 1, are repeated by way of explanation:

> By necessity, defense planning will vary among banks. The size of the institution, its location, the number of banking offices, and the types of business predominating will influence the scope and emphasis of its plan. Many of the provisions described herein will be inappropriate and unnecessarily elaborate for the smaller banks. What would be feasible, even necessary, for a large metropolitan bank may not be suited at all to the needs of its distant correspondent. It is not expected that these smaller banks should plan for extensive internal organizations along the lines of those desirable for larger institutions; nevertheless, the fundamental principles set forth herein are applicable to all banks and can be beneficial to them, even the smallest. The important consideration is that each bank should have some sort

of plan, tailored to suit its own particular problems, policies, and financial situation . . . Detailed planning for the carrying out of essential functions is left generally to the individual banks. Uniformity of approach in the handling of particular operations is desirable, however, and to that end, the planning in appropriate areas should be developed at the clearinghouse or regional level.

In many areas of planning, it will be advisable, and even necessary, to consult with neighboring banks and local civil defense officials. The importance of avoiding possible conflict with civil defense plans is axiomatic. Wherever possible, therefore, coordination should be a basic consideration. Banks also are urged to get their programs in motion promptly. Again, to quote from the Introduction in Booklet No. 1:

> It is recognized that future developments in all probability will necessitate revisions in the various aspects of emergency planning, and it is inherent in the nature of such planning that it be kept fluid. However, it does not necessarily follow that future developments will complicate plans already in existence. National security and self-interest point to the need for immediate planning; and, even though some uncertainties exist, it seems essential, therefore, for banks to complete their programs promptly, rather than to delay action in the hope that the resolution of some of these uncertainties will make planning easier at some future date.

ADVISORY COMMITTEE ON COMMERCIAL BANK PREPAREDNESS
JOHN J. MCCLOY, *Chairman*

BANKING COMMITTEE ON EMERGENCY OPERATIONS
G. EDWARD COOPER, *Chairman*

DUPLICATE OR ALTERNATE RECORDS

An integral part of a preparedness program for emergency operations is the safeguarding of vital records. It is readily apparent that, following a disaster, the availability of records will greatly facilitate the work of reconstruction in the effort toward "business as usual." The express purpose of the records protection program should be to provide an independent means of reconstructing the bank's asset and liability position, and its account relationship with customers, thus furnishing surviving or successor management with sufficient information to continue operations. To accomplish this objective, it is imperative that a bank have a definite program for records protection, under the direction of the individual or committee responsible for emergency planning.

WHAT TO PROTECT

As a first step in the development of the plan, it is necessary to determine what records should be protected. This might well be accomplished by completing (1) an inventory, (2) an appraisal, and (3) a classification. This approach is based on the premise that differentiation should be made between records which are vital or necessary for reconstruction purposes, and those which are merely desirable. Unless this delineation is made, with a strict interpretation of what constitutes a "vital" record, so much material may be included and so much effort and money expended that not only would the program become costly but the task of reconstruction would be extremely cumbersome and complicated.

In making the inventory, every record in the bank should be included. The list should then be reviewed, and those records which obviously are valueless for purposes of the program can be eliminated from further consideration. All remaining records should then be classified realistically, thinking in terms of "what is absolutely

necessary to get back into operation," rather than "what we would like to have."

In Section 1, on page 11, a basic list of bank records is divided into two categories: "essential" and "desirable." The listing is not all-inclusive, and variations in classification will be justified among banks. This check list, therefore, is intended only as a guide for each bank in the classification of its own records, based on an analysis of individual operations and problems.

It is assumed that cash, securities, collateral, and other assets will be stored in vaults overnight, and that, as a daytime measure, they will be protected on the premises to the greatest extent possible. Careful consideration should be given to the matter of "on the spot" protection at the regular office location, since one of the real problems for banks is the safeguarding of current records and work which is in progress. The protection of assets and records on the premises is treated in Booklet No. 4, entitled *Physical Properties*.

HOW TO PROTECT

Protection of records may be accomplished by duplication, by dispersion, and by vault storage. Duplication is the most widely used method and is the most practical for banks because of its adaptability and the various methods available, such as making carbon copies, preparing photo copies, and microfilming. Where records are duplicated, a copy should be stored far enough away from the original to preclude a simultaneous loss. Dispersion of essential records may be feasible for banks having branch systems or for those institutions desiring to utilize the facilities of out-of-town warehouses as depositories. Vault storage would seem to offer the best means of safeguarding current records and work in progress.

In many cases, microfilming may be the preferable method of duplicating because less storage space is required and exact images of the original are provided. However, certain possible disadvantages should not be overlooked. For example, faulty images may result from improper or careless operation of equipment at the time of photographing. Also, special equipment may have to be pur-

chased in order to adequately photograph and to reconstruct, if necessary. Reconstruction from film records can be a difficult task, and, in addition, microfilming is likely to prove more costly than other methods unless there is an appreciable volume. Many banks, of course, presently utilize photographing equipment, and these institutions are in a position to coordinate protective measures with regular operating procedures.

The microfilm copy of any record should be given the same protection as the record itself and should be stored under proper conditions for preservation, as set forth in Section 3, page 27. Under certain circumstances, the cost of maintaining a protection program can be greatly reduced by the use of carbon copies and/or duplicates. In connection with the question of costs, it is well to bear in mind that regardless of the exact method chosen, a good records protection program carefully instituted can simplify business procedures and may very well offset additional costs by forcing a review of current record-making and retention practices. Through thoughtful planning, such a program also may utilize savings in subsequent bank audits as a partial offset to total costs.

Section 2, page 16, sets forth a procedure whereby essential information can be protected and reconstructed from records on hand. The section is not intended to be all-inclusive by covering all the records in any given bank, since the procedure for the types of records mentioned can be expanded to cover the other records that are deemed essential by the individual bank.

The procedure provides for the initial microfilming of certain current records to establish a "base." Thereafter, changes affecting the basic records should be duplicated to maintain a current status. The base should be re-established periodically, thus narrowing the period to be covered if reconstruction should become necessary.

Once a given record has been duplicated, a copy and all subsequent changes affecting that record should be forwarded to the storage location. Provision should be made at the storage point for the destruction of obsolete duplicates. As records are updated, those which are no longer necessary for reconstruction purposes should

be destroyed so that the centers will be free of any unnecessary and possibly confusing material.

Reconstruction may have to be accomplished under handicaps imposed by emergency conditions, with scant and inexperienced help. Instructions for reconstruction, therefore, should be prepared and filed in several places in an effort to assure recovery of at least one copy. These instructions should be as simple as possible and, most important, easily understandable by persons who may be unfamiliar with banking operations. It may be considered advisable, also, to develop an alternate method of reconstruction. In addition, materials and equipment required for reconstruction should be made available at the records depository, as these may be impossible to obtain following a major disaster. Each bank must decide as to the nature and extent of these preparations in attempting to formulate an effective program, based on an appraisal of its own situation.

After procedures for reconstruction have been prepared, they should be tested to disclose possible weak points and unforeseen problems. An occasional test drill also is of value in training personnel for the tremendous job of reconstruction under severe handicaps. It must be remembered that hindsight cannot produce a single record which has been completely destroyed.

RECORDS STORAGE CENTERS

A remote rural area which is likely to be free from attack damage is the ideal location for a records storage center. As stated in Booklet No. 3, *Continuity of Management and Alternate Headquarters,* many banks will plan to locate storage facilities at their alternate headquarters. Others will find it expedient to make a different arrangement. In any case, the physical arrangements and equipment for protection and reproduction of the stored records are important aspects in the protection program. Records storage centers and their construction features are discussed more fully in Booklet No. 4, *Physical Properties.*

SECTION 1

CHECK LIST OF PRINCIPAL RECORDS TO BE CONSIDERED IN PLANNING FOR EMERGENCY PROTECTION AND PRESERVATION

Note: Emphasis is again placed on the fact that the list of records and relative classifications shown in this section is for the purpose of providing a basic guide. It is recognized that some banks may wish to modify the listed items and/or classifications assigned in order to effect more suitable accord with their own particular operations, form nomenclature, and other circumstances which vary from bank to bank.

CLASSIFICATION

E—Essential — Those records which are necessary to establish and support the asset and liability position of the bank and account relationships with customers.

D—Desirable — Records which are secondary in nature but which contain important details of transactions or which will greatly facilitate the task of reconstruction.

RECORD

	E—Essential	D—Desirable
Auditing and Accounting		
Accrual records—income and expense	E	
Audit working papers		D
Auditors and examiners reports		D
Bank call reports		D
Bank reconcilements—due to		D
—due from	E	
Building tenant ledger		D
Brokers statements (reconcilements)—current	E	
Earnings and dividends reports		D
Monthly lists of outstanding official checks	E	
Monthly reports to officers and directors		D
Reports to executive committees		D
Safekeeping statements (due from —reconcilements)—current	E	

E—Essential D—Desirable

Tax records (returns, etc.) ..... D
Vault combinations ..... D

Bank Deposits—Due To

Ledger ..... E
Postings (debits and credits)
In process ..... E
Recorded ..... D
Signature cards ..... D
Statement sheets ..... D
Trial balance and journal—current E
—other D
Stop payment orders ..... E

Bond Department

Brokers confirmations ..... D
Brokers statements ..... D
Delivery receipts ..... E
General ledger ..... E
Invoices ..... E
Journals
Receipts ..... E
Disbursements ..... E
Purchases and sales ..... E
Pledge agreements ..... E
Securities ledger ..... E

Christmas Savings Deposits

Ledger ..... E
Postings
In process ..... E
Recorded ..... D
Trial balances—current ..... E

Collections

Collection payment records ..... E
Collection register ..... E
Incoming collection letters ..... D
Items placed for collection, notes, etc. ..... E
Window tickets and receipts ..... E

Commercial Deposits

Attached and assigned accounts ..... E
Checks
Paid ..... D
In process ..... E
Corporate resolutions, etc. ..... D
Deferred exchange records ..... D
Deposit tickets
In process ..... E
Posted ..... D
Dormant accounts (ledger or lists) E
Journals
From last base record date ..... E
Others ..... D
Ledgers
Open ..... E
Closed ..... D
Microfilm records and films ..... E
Signature cards ..... E
Statements ..... D
Statement stubs ..... D
Stop payment orders ..... E
Trial balances
From last base record date ..... E
Others ..... D
Undelivered statements and cancelled checks ..... D

Corporate Trust Department

Accounts receivable ledger ..... E
Accounts securities records ..... E
Bond and coupon payable ledger ..... E
Corporate synopsis book ..... D
Correspondence—general ..... D
Cancelled bonds and coupons ..... E
Cremation certificates for bonds and coupons ..... E
Dividend checks paid ..... E
Dividend check register ..... E
Dividend payable ledger ..... E
Document files ..... E
General ledger ..... E
Information at source tax returns (copies) ..... D
Posting tickets ..... E
Purchase and sales orders, invoices E
Receipts for bonds and coupons ..... E
Receipts for insurance premiums ..... D
Receipts for stock certificates ..... E

E—Essential D—Desirable

Stock certificates	
Cancelled	D
Unissued	D
In process	D
Stock certificates records or stubs	D
Stock ledgers—open and closed	E
Stock register records	E
Stock transfer register—transfer sheets	E
Stop orders	E
Trust receipt ledger	E
Demand Certificates of Deposit	
Certificates—blank	D
Register	E
Demand Deposit Account Analysis	
Analysis work sheets or cards	D
Average balance cards	D
Due from Banks	
Advices from correspondents	D
Bank statements received	D
Ledger and posting—debits and credits	E
Trial balances and journal—current	E
Files	
Cashier's or secretary's file	
Current	E
Closed	D
Contact information files	D
Correspondence—general	D
Correspondence—trust	E
Credit files	D
Documents—trust	E
Invoice files—bond department	E
Foreign Department	
Current transaction files	E
Completed transaction files	D
Record books (ledgers)—outstanding credits, collection register, money transfer ledger, drafts advised outstanding, unpaid and prepaid exchange applications, trust receipts, contracts, exchange position	E
Records of travelers letters of credit on consignment	E
General	
U. S. Series "E" bonds	D
U. S. Series "E" bonds—record of bonds sold or redeemed	E
Travelers checks	D
Travelers checks records	E
General Ledger	
Daily statement of condition	D
General book resume sheets (daily make-up sheets)	D
General ledger, income and expense ledgers, and subsidiary ledgers	E
General ledger tickets (debits, credits, and proof sheets of all departments)	E
Journal	D
Investments (Securities Owned)	
Postings to securities ledger (invoices, etc.)	E
Securities	E
Securities ledger (showing bond or certificate numbers)	E
Loans and Discounts (Including Instalment Loans)	
Collateral, guarantees, subordination or other agreements	E
Collateral record and receipts	E
Corporate resolutions authorizing borrowings	D
Daily loan reports	D
Journals and posting tickets	E
Liability ledger	E
Loan register	E
Maturity ticklers	D
Notes, contracts, participation certificates, etc.	E
Mail	
Insurance records	E
Postage meter readings	D

E—Essential D—Desirable

Registered mail
- Incoming records ..... D
- Outgoing records ..... D

Return receipt cards ..... D

Management

Bank charter, certificate of incorporation, and by-laws ..... E
Bankers blanket bonds ..... D
Capital stock certificates records or stubs ..... E
Capital stock ledger ..... E
Capital stock transfer register ..... E
Dividend checks ..... D
Dividend check register ..... E
Insurance policies ..... D
Job descriptions and operations manuals ..... E
Leases for properties rented to others or from others ..... E
Minute books of directors, all committees, stockholders ..... E
Proxies ..... D
Real estate owned title papers ..... D
Receipts for stock certificates ..... E
Record of insurance coverage ..... E
Record of office machines and equipment ..... E
Record of outstanding dividend checks ..... E

Official Checks and Drafts

Cashier's or treasurer's checks paid ..... E
Cashier's or treasurer's check register or copies used as register E
Certified checks paid ..... E
Certified check register ..... E
Christmas Club checks paid ..... D
Christmas Club check register ..... E
Drafts paid on correspondent banks E
Draft register ..... E
Expense checks paid ..... E
Expense check register ..... E
Expense voucher (copy of check) and bills ..... E
Money orders paid ..... E
Money orders register or copies of money orders ..... E
Stop payment orders or special instructions ..... E

Paying and Receiving Tellers

Armored car service records ..... E
Cash book ..... D
Cash items ..... E
Checks, deposits, and other work in process ..... E
Machine tapes ..... E
Night depository record ..... E
Tellers cash ..... E

Personnel

Attendance records (daily) ..... D
Employee records (personnel folders) ..... E
Profit-sharing records
- Administered by agent ..... D
- Self-administered ..... E

Records of retirement, group insurance, hospitalization insurance, etc.
- Administered by agent ..... D
- Self-administered ..... E

Salary ledger—payroll records ..... E
Salary receipts ..... E
Time cards
- Current pay period ..... E
- Others ..... D

"W-2" form copies ..... D

Safe Deposit Vault

Cash book ..... E
Contracts, including depositors' signatures ..... E
Entry cards ..... E
Guard keys ..... E
Rent records ..... D

Safekeeping

All safekeeping or custody records E

E—Essential D—Desirable

Savings Deposits

Deposit tickets	D
Journal sheets or tapes	
From last base record date	E
Others	D
Ledgers	
Open	E
Closed	D
Resolutions, assignments, etc.	D
Signature cards	E
Trial balances	
From last base record date	E
Others	D
Withdrawal receipts or checks	D

Transit and Proof

Checks, deposits and other work in process	D
Outgoing cash letters	E
Proof machine tapes	
In process	D
Others	D
Proof sheets (batch proofs)	
In process	D
Others	D
Tellers lists	D

Trust Department

Address book	E
Cash ledgers	E
Insurance policies	D
Journals	E
Nominee records	D
Posting tickets	
In process	E
Others	D
Property controls	D
Property ledgers	E
Purchase and sales orders	E
Real estate title deeds and title insurance policies	D
Remittance records	E
Tabulating cards	E
Temporary "in and out" vault tickets	E
Trial balance	
From last base record date	E
Others	D
Wills and other instruments	E

SECTION 2

PROCEDURE FOR INTEGRATING THE USE OF CARBON COPIES AND/OR DUPLICATES OF BANK RECORDS INTO A PROTECTION OF ESSENTIAL RECORDS PROGRAM

Note: This type of procedure is especially recommended for those banks which have a concentration of branches in target areas and maintain microfilm equipment only at central clearing offices. Such banks might refrain from attempting to set up a program due solely to the initial cost of extra microfilming equipment for each branch.

It is emphasized that individual banks may wish to expand, contract or otherwise deviate procedurally from the exact outline described in this section in order to effect more suitable accord with the specific circumstances or requirements peculiar to their own particular operations.

DEMAND DEPOSIT ACCOUNTS

(Commercial, Special Checking, Due to Banks, etc.)

OPERATION

1. Assign code numbers to all accounts, writing the code number on statement and ledger sheets, and on the signature cards.

2. Microfilm signature cards and thereafter take duplicate signature cards for new accounts, giving each new account a code number, and forward duplicate to storage daily.

3. Immediately run proofs, in duplicate, showing account code numbers and balances, and forward the original of proofs to the storage vault.

4. Microfilm existing current stop payment orders and special instructions and thereafter prepare in duplicate, and forward duplicate to the storage vault daily.

5. Prepare bookkeepers registers (journals) in duplicate, showing the appropriate labeling of each section, and forward duplicate to storage vault daily.

6. Prepare an extra copy of the rejected check register and forward to the storage vault daily.

7. Run weekly proofs, in duplicate, of accounts showing account code numbers and balances and forward the originals to storage vault on current day.

8. Keep deposit tickets, checks, ledgers, and all unposted work in the vault at all times when not actually in use.

RECONSTRUCTION

1. Obtain the latest available weekly proofs, which should show account code numbers and balances as of date proof was made. (Will probably consist of several weekly sectional proofs, so arrange in order.)

2. Obtain bookkeepers registers (journals), showing old balance, debits and credits, and new balance, for each day since date of sectional proof used in Par. 1.

3. Obtain supply of ledger sheets preferably, otherwise columnar pads, listing sheets or other forms available.

4. List code numbers and amounts from weekly proof (Par. 1) on available forms (Par. 3) in applicable spaces.

5. Enter debits and credits to proper accounts from bookkeepers registers (Par. 2).

6. Add all the latest balances and prove to total on financial statement.

7. Obtain duplicate signature cards and original film of signature cards.

8. Enter names and addresses of depositors on lists obtained in Par. 4, using code numbers to identify signature cards and commercial accounts.

9. Obtain a supply of regular ledgers and post applicable information thereon, if not previously done.

> Note: To save time in reconstructing the latest balances to be proved to total on financial statement (Par. 6), it will prove desirable to use balances only, as reflected on intervening bookkeepers registers (journals) (Par. 2). This method should be substituted for the more detailed steps required in entering individual debits and credits (Par. 5), a procedure which may be delayed pending actual necessity or greater time availability. It is suggested that this same principle also be applied in the reconstruction of other records, wherever possible.

TIME DEPOSIT ACCOUNTS

OPERATION

1. Microfilm all signature cards and thereafter take signature cards in duplicate for new accounts and forward duplicate to the storage vault daily.

2. Immediately run proofs of all accounts, in duplicate, including term savings, club accounts, time deposits, and school savings, showing account numbers and balances, and forward original of proofs to the storage vault.

3. Prepare savings registers (journals) in duplicate, showing account numbers, and forward the duplicate to the storage vault daily.

4. Run monthly proofs of all accounts in duplicate, showing account numbers. The originals of the proofs must be forwarded to the storage vault on the current day.

5. Run savings interest proof for June and December (or other interest periods) in duplicate and forward original to the storage vault.

RECONSTRUCTION

1. Obtain latest available proofs showing account numbers and balances.

2. Obtain all savings registers (journals) since date of proof used in Par. 1.

3. Obtain supply of ledger cards preferably, otherwise columnar pads, or other forms available.

4. List account numbers and balances from savings proofs (Par. 1) in applicable spaces.

5. Enter debits and credits to proper accounts from savings registers (Par. 2).

6. Add all final balances and prove to total on financial statement.

7. Obtain duplicate signature cards and original film of savings signature cards.

8. Enter names of depositors on lists obtained in Par. 4, from duplicate signature cards and film, using account numbers to identify signature cards to savings accounts.

LOAN RECORDS

OPERATION

1. Microfilm notes, liability ledgers, guarantees, subordination and other important loan agreements (include financial statements of large borrowers) immediately and periodically thereafter.

Note: In large volume consumer loan banks, where payments are not endorsed on the notes, it might be reasonable to refrain from microfilming the notes and consider the ledger to be the basic record.

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2. Run proofs of notes for all commercial type loans and of the liability ledgers for all other types of loans and forward the originals to the storage vault.

3. Make monthly proofs of commercial notes and other liability ledgers and send the originals to the storage vault. Show numbers opposite amounts on proofs of liability ledgers.

4. Send loan payments tickets and/or coupons to the storage vault daily. For ticketless posted loans, run daily old and new balance proof in duplicate, showing loan numbers opposite balances, and forward the original to the storage vault.

5. Prepare a daily balanced list of all new loans showing: name(s), loan number, amount, classification, and endorser, if any, and forward to the storage vault. In some areas, such as new trust receipt on indirect collection loans, an extra copy may be prepared and sent to storage in lieu of a prepared list.

RECONSTRUCTION

1. Obtain latest film of notes and/or liability ledgers, any intervening proofs, daily lists of loans made, and payment tickets or old and new balance proofs.

2. Obtain supply of liability ledger cards, columnar pads or other available forms.

3. For commercial type loans, transcribe new records from the latest microfilm of notes. Reconstruct the intervening daily activity from the loan payment tickets and the lists of loans made.

4. For other type loans, transcribe loan number and balance from last monthly proof. Reconstruct the intervening daily activity from the loan payment tickets or the daily old and new balance proofs, and from the lists of loans made.

5. When all available records have been posted, list final balances and prove to latest financial statement.

6. Fill in names and other pertinent information from latest microfilm of records or lists of loans made.

GENERAL LEDGER RECORDS

OPERATION

1. Forward all previous ledgers to storage vault.

2. Microfilm current ledger sheets and send film to storage vault.

3. Forward general ledger register (journal) and financial statement to storage vault daily. Send copy of profit and loss statement monthly.

4. Forward copies of general ledger tickets and profit and loss tickets to storage vault daily.

5. Prepare a weekly list of outstanding suspense items, in duplicate, and forward original to storage vault. Describe items in detail.

6. Run a proof, in duplicate, of subsidiary ledgers which support sundry accounts receivable and reserve accounts, such as dealers reserve accounts, showing names, etc., opposite balances. Forward the original of the proof to storage vault. Monthly proofs must be made, in duplicate, showing names opposite balances, with original forwarded to storage vault.

RECONSTRUCTION

1. Prepare new general ledger by posting amounts from the previous day's financial statement to the applicable accounts.

2. Reconstruct subsidiary ledgers as follows:

a. Obtain latest available monthly proof (Par. 6 above) and the general ledger tickets for each day since date of proof.

b. Post names and balances from proof to ledger sheets, columnar pads, or other available forms.

c. Post debit and credit entries from general ledger tickets to applicable subsidiary account.

d. List final balances and prove to new general ledger.

EXCHANGE DEPARTMENT AND/OR OFFICIAL CHECK RECORDS

OPERATION

1. Immediately run proofs, in duplicate, of certified checks, cashier's checks, money orders, checks payable, certificates of deposit, etc., by year date, number, and amount, and forward the originals to the storage vault. Checks and certificates paid will appear on the general ledger registers (journals) so that a record of the outstanding can be reconstructed, if necessary.

2. Sort the audit stubs numerically daily and list the amounts by classification. The first and last number in each classification should be shown on the tape which should be forwarded to the storage vault daily. The numbers of any cancelled items will be shown in place of the amount of such items.

3. Prepare in duplicate a monthly proof of outstanding items, showing the year date, numbers, and amounts. Forward the original to the storage vault.

4. Microfilm existing current stop payment orders and special instructions. Thereafter, prepare in duplicate and forward the duplicate to the storage vault daily.

RECONSTRUCTION

1. Obtain latest monthly proof of exchange items outstanding, showing numbers and amounts.

2. Obtain daily exchange tape listing of audit stubs for each day since date of proof used in Par. 1.

3. Obtain daily general ledger registers (journals), showing items paid by numbers and amounts. Will also show total amount issued.

4. Obtain a supply of exchange registers, otherwise columnar pads or other available forms.

5. List item numbers and amounts from proof (Par. 1) on available forms, starting with oldest issue date, leaving space for date paid.

6. List items issued by date, number, and amount from tape; listings of audit stubs since latest proof; and, from general ledger register (journal), show date opposite applicable number and amount of items paid.

7. After all available records are posted to date, list open items from forms used and balance to figure on financial statement.

Note: Maintain a daily control for each type as posted.

SAFE DEPOSIT, SAFEKEEPING, STORAGE RECORDS

OPERATION

1. Microfilm all signature cards (both sides when applicable). Thereafter, take duplicate signature cards and forward the duplicate to the storage vault daily. The signature cards will show the date that the box was rented and can be used for future billing in the event that the history cards are destroyed.

2. Send closed signature cards to the storage vault daily.

3. Keep safekeeping, safe deposit, and special depository records in the vault at all times.

RECONSTRUCTION

1. Obtain original film of safe deposit signature cards from the storage vault. (Cards will be alphabetical thereon.)

2. Obtain duplicate signature cards for new rentals since inception of plan and sort them numerically.

3. Obtain closed signature cards since inception of plan and sort them numerically.

4. Compare closed signature cards (Par. 3) to new signature cards (Par. 2) by name, box number, and date to eliminate all applicable

duplicate signature cards. Those cards remaining should be current open rentals for box numbers concerned.

5. Obtain a supply of safe deposit signature cards or other available forms.

6. Review film (Par. 1), or have positives printed from it, to determine names and box numbers for rentals not covered by remaining open duplicate signature cards in Par. 4 or closed signature cards.

7. Type information from Par. 6 on available forms.

COLLATERAL RECORDS

OPERATION

1. Immediately send all outstanding audit copies of collateral receipts to the storage vault.

2. Immediately send to storage the last completed brokers securities reconcilement, a copy of all collateral substitution sheets, and/or brokers and dealers deposit and withdrawal sheet for securities used since date of last brokers securities reconcilement.

3. Thereafter, send audit copy of all new collateral receipts issued to the storage vault daily. When collateral is released, send copy of collateral receipt, receipted by the borrower, to storage vault.

4. Make memorandum record of partial withdrawals of collateral and forward to storage vault daily. Show name of borrower, collateral receipt number, and description of securities withdrawn. This memorandum is in addition to usual receipt taken on back of collateral receipt.

5. As a means of verifying the open collateral receipts, make a monthly proof of open ledger copies of collateral receipts by numbers, and open collateral register numbers and send to storage vault.

6. Forward copy of collateral substitution sheet and/or brokers and dealers deposit and withdrawal sheet for customers to the storage vault daily. Also prepare an extra copy of brokers securities reconcilement sheet each month and forward to storage vault.

RECONSTRUCTION

1. Obtain all audit and ledger copies of collateral receipts since inception of program.

2. Sort audit and ledger copies numerically and attach audit copies to applicable ledger copies. The remaining open audit copies should be the current open collateral receipts.

3. Post partial withdrawals to the remaining audit copies from the daily memorandum record.

TRUST DEPARTMENT RECORDS

OPERATION

1. Microfilm all records classified as essential and send film to storage.

2. Thereafter, send daily tickets, movement orders, deposit and withdrawal orders, etc., or copies thereof, to storage daily.

Note: In some trust installations, copies of daily journals can be substituted for certain groups of tickets or orders.

3. Send copies of any monthly proofs to storage on date of proof.

4. Make extra copy of all minutes of the trust investment committee and send to storage immediately.

5. Make extra copy of statements of account of court trusts when filed with court and of trust department accounts when sent to trust customers and send to storage daily.

6. After the original microfilming of the document files, make extra copies of essential documents and send to storage daily. The following are examples of documents which might be protected in this manner:

Estates in Probate

Wills and codicils admitted to probate
Letters testamentary or of administration
Inventories and appraisements
Decrees of partial, ratable or final distribution
Court orders authorizing any unusual acts
Instructions of heirs or legatees
Creditors' claims

Testamentary Trusts

Decrees of distribution, including a copy of the will should the decree incorporate the will by reference
Orders granting instructions
Receipts of beneficiaries for distributions of corpus

Living Trusts

Trust agreements and amendments
Letters of instruction
Receipts for distributions of corpus

Guardianships

Letters of guardianship
Inventories and appraisements
Orders granting instructions

Receipt of a minor upon reaching majority, of an incompetent upon being restored to competency or of the personal representative of the ward upon death

Depositoryships

Orders appointing depository
Receipts of depository for assets deposited
Court orders directing any act of depository

Corporate Trusts

Trust agreements, etc.

The following are other types of records or documents which can be protected after initial microfilming by preparing an extra copy to be sent to storage daily:

Investment review sheets
Ticklers
Leases
Customers address cards
Stop payment orders (corporate trust)
Escrow documents

In order to maintain a starting point from which records may be reconstructed within a reasonable length of time, the nature, size, and volume of transactions in many trust departments will dictate that certain basic records be microfilmed periodically. The various ledger accounts are good examples of the type of record that will fall in this category. A review of the activity on each record should indicate the proper intervals.

RECONSTRUCTION

1. Re-establish accounting records from the latest microfilm on available forms or columnar pads.

2. Update records from tickets, orders, journals, etc., which were subsequently sent to storage daily.

3. Balance to latest fiduciary statement.

4. Re-establish document files with photostatic copies of the necessary documents which were microfilmed and extra copies subsequently sent to storage.

FOREIGN DEPARTMENT RECORDS

Many records in the foreign department, such as general ledger, deposit accounts, loan, exchange or official checks, collateral, etc., are sufficiently similar to those previously covered that the same type of protection and reconstruction can be applied.

Most other records can be protected and reconstructed by a common procedure. The following fall into this category:

Collections
Acceptances
Advances
Documentary drafts
Remittance orders
Exchange trading contracts

In most banks having foreign departments, multiple numbered forms are used to record, advise, ticklerize, and provide final entry tickets and information for these types of transactions.

One copy of the form should be sent to storage on the date recorded, and another copy, containing all information pertinent to the disposition of the transaction, should be sent to storage on the date that the transaction is finalized. If a limited number of copies of these forms make it impractical to send copies to storage in this manner, additional carbon tissue inserts should be used.

By matching and eliminating the forms covering closed transactions, a current record can be established.

Ledger (or other primary) record of letters of credit and amendments should be microfilmed and the film sent to storage. Thereafter, make extra copies of letters of credit and amendments and forward to storage daily.

Make an initial proof of outstanding items in the "prepaid letters of credit" account, including identifying numbers, and forward to storage. Thereafter, send monthly proof, or duplicate thereof, to storage, showing account numbers.

Send drafts, tickets or registers (or copies) which show the negotiation of drafts paid under individual letters of credit to storage daily.

Microfilm all documents which have been classified as essential and forward film to storage. Thereafter, obtain documents in duplicate and send duplicate to storage daily.

OTHER RECORDS

Most accounts, subsidiary accounts, and records which do not fall within the general category of a type of record previously mentioned can

be preserved and reconstructed if the following procedure is used:

1. Microfilm the essential record and send film to storage.

2. Thereafter, send the various tickets, orders, etc., or copies (duplicates) thereof, that will change their status to storage daily.

3. Microfilm the basic record periodically to establish a new starting point for reconstruction. The activity of an account will indicate the frequency that additional microfilming is desirable.

In large banks, basic records and information on all or some of the following are maintained by use of tabulating equipment:

Loans and discounts	Safe deposit
Own acceptances purchased	Safekeeping
Advances	Time credit
Acceptances	Personnel and payroll
Bills sold with own endorsement	Business development
Letters of credit	Personal trust accounting
Prepaid letters of credit	Corporate trust accounting

Where records are maintained on tabulating equipment, the problem of protecting and reconstructing records is greatly simplified. By sending duplicates or copies of daily registers and records, which are printed out by the tabulating machines, to storage, most essential information is easily protected and is kept on a current basis.

Account proofs should always be made in duplicate, and the duplicate sent to storage on the date of proof.

SECTION 3

RECOMMENDED STORAGE CONDITIONS FOR PROTECTION AND PRESERVATION OF MICROFILM

MICROFILM STORAGE PROTECTION

The National Bureau of Standards makes the following recommendations for storing microfilms:

For safety, even under normal circumstances, microfilm records should not be kept in the vicinity of the original records. During a national emergency, important records should be moved to an area not likely to be involved in hostilities. If this is not practical, an underground storage vault (not a part of a building) seems desirable. Underground vaults are usually damp, and if this is the case, the film should be sealed in metal cans. Before sealing in cans, the film should be conditioned to about 30% relative humidity to allow for an increase in relative humidity in the cans due to lowering of the temperature to that in the vault. If the vault is heated to usual room temperature (65° to 75° F.), the film need not be sealed in cans. The use of drying salts in the can with the film is not recommended though such salts could be used in the vault if properly replenished as needed. Cans need not be used if drying salts are used in the vault. Underground storage should protect the film records from damage by intense radioactivity but not necessarily from the explosive force of a direct hit.

Our recommendations for film storage under normal conditions are as follows:

Where film is stored in air-conditioned offices, no humidification of storage cabinets is necessary. However, microfilm storage cabinets equipped with trays for salt solution in the bottoms of the cabinets for humidification purposes are desirable. We recommend saturated sodium dichromate solution with an excess of sodium dichromate (undissolved crystals in solution) for humidification purposes. This salt will maintain 52% to 53% relative humidity in air-tight cabinets at room temperature. If the cabinets are not reasonably air tight, the relative humidity mentioned above will not be maintained.

Where humidified cabinets are to be used, it is extremely important that they have intelligent servicing. In dry weather, as in heated rooms in the wintertime, the salt solution will evaporate and water should be replenished from time to time. In the summertime during periods of high

humidity, the salt solution will take up water and some should be removed from the trays. It is very important to see that an excess of the salt is present at all times. If the solution becomes less than saturated, it will no longer act as a dehumidifying agent and in extreme cases may give up sufficient moisture to cause the film to become damp and promote the growth of fungus on the film. The optimum relative humidity condition for the storage of microfilm is 40% to 50%.

PROTECTION AGAINST FIRE

Because of the danger involved, the National Fire Protection Association makes the following recommendations for safeguarding microfilm from fire:[1]

While cellulose acetate film does not burn any more readily than paper records, it may be otherwise affected by some of the ordinary storage conditions or fire conditions which would not affect paper records. For example, paper is not affected by the temperatures or humidities encountered under ordinary storage conditions, but high climatic humidity at ordinary room temperature may affect the base or the emulsion of microfilm. These effects are considerably aggravated when humidity is coupled with high temperature as, for example, when the temperature is above 200° to 250° F. or when film is exposed to steam.

When safes or other insulated record containers and record vaults are exposed to fire, the interior does not reach a temperature which is damaging to papers within the period for which the safe or vault is rated, or during the subsequent cooling period. The interior temperature may, however, exceed 200° to 250° F. and the interior may contain steam produced from the heating of the insulation or the vault walls. While these conditions would not be damaging to paper records on the interior of the safe or vault, tests made by Underwriters' Laboratories, Inc., by film producers, and by safe manufacturers indicate that such conditions can affect the base or the emulsion of microfilm either due to the high temperature or due to the steam.

Tests show that when microfilm is exposed for a long period of time to a temperature of 225° to 275° F. in the presence of steam, or to a dry temperature at 300° F. for a shorter period of time, the film warps or shrinks so that it cannot readily be run through a projector, although the individual frames of the film are legible and reprints of them can readily be made. The tests have not determined the point at which temperature alone or temperature coupled with steam will avoid such damage. Experi-

[1] *Protection of Records*, National Fire Protection Association, Boston, Massachusetts, 1947.

ments are being made to determine these critical points for film stored in various types of containers.

The tests which have been conducted to date indicate that for maximum protection against steam, microfilm stored in safes or vaults should be in friction-lid tin cans, rather than stored loose, or in cartons or even in tin containers with telescoping lid.

Obviously, in an uninsulated record container, microfilm will burn as readily as paper, because when exposed to fire the interior of the uninsulated record container is almost instantly at a temperature which will char either microfilm or paper.

SELECTED REFERENCES

Since weapon capabilities constantly change, the following list of reference materials is limited, for the most part, to materials of recent date. Even so, later revisions and more recently issued publications should be sought and substituted when possible. References to earlier publications will be found in many of the publications listed.

RECORDS PROTECTION

National Industrial Conference Board, Inc. *Protecting Records in Wartime,* Studies in Business Policy No. 51, April 1951. National Industrial Conference Board, Inc., 460 Park Avenue, New York 17, N. Y. $1.00 per copy.

Shiff, Robert A. "Protect Your Records Against Disaster," *Harvard Business Review,* Boston, Massachusetts, July-August 1956 (Reprint). Local civil defense authority. No charge indicated.

Federal Civil Defense Administration. Technical Bulletins and other publications may be obtained from local civil defense authority or Federal Civil Defense Administration, Battle Creek, Michigan, without charge. May be purchased from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at prices indicated.

.....*Protection of Vital Records and Documents,* Technical Bulletin 16-2, May 1955. 5 cents per copy.

.....*Industry Defense Check List* (Section IX), Technical Bulletin 16-4, April 1956. 15 cents per copy.

MICROFILMING FOR PROTECTION

Burroughs Corporation. *Safeguarding Vital Records,* undated. Burroughs Corporation, Detroit 32, Michigan. No charge indicated.

Recordak Corporation. *A Comprehensive Security Program for Vital Corporate Records*, 1956. Recordak Corporation, 415 Madison Avenue, New York 17, N. Y. No charge indicated.

Eastman Kodak Company. *Storage of Microfilms, Sheet Films and Prints*, Kodak Pamphlet No. F-11, October 1955. Sales Service Division, Eastman Kodak Company, Rochester 4, N. Y. No charge indicated.

AIR COORDINATING COMMITTEE

AIR COORDINATING COMMITTEE,
Washington, D. C., September 4, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
House of Representatives, Washington, D. C.

DEAR SENATOR ROBERTSON: In accordance with your letter of August 14, 1958, there is given below a summary of the Air Coordinating Committee's recommendations during the past year with respect to its participation in developing a complete program to meet civil aviation requirements under the Defense Production Act.

1. The Air Coordinating Committee coordinated four quarterly civil aviation programs related to priorities and allocations of controlled materials required for the production of civil air-carrier aircraft.

2. The Air Coordinating Committee participates in defense production activities pursuant to its responsibilities conferred by Executive Order No. 10655, January 28, 1956 (21 F. R. 665). Under this Executive order, the Committee is authorized to "examine aviation problems and developments affecting more than one participating agency; develop and recommend integrated policies to be carried out and actions to be taken by the participating agencies, or by any other Government agency charged with responsibility in the aviation field; and, to the extent permitted by law, coordinate the aviation activities of such agencies except activities relating to the exercise of quasi-judicial functions."

3. The Committee approved and recommended four quarterly programs (C–29 to C–32 inclusive) to the Aircraft Production Resources Agency of the Department of Defense as a basis for the allocation of controlled materials to aircraft manufacturers to meet the civil requirements as established. These programs provided for the start of production of 344 new air-carrier aircraft during the year. The fourth quarterly program (C–32) provides for the start of production of 83 new carrier-type aircraft. In addition, the program recommends the allocation of controlled materials for 629 aircraft now under construction which were approved in prior programs.

This program coordinated the civil requirements as presented by the Civil Aeronautics Administration with other designated claimant agencies as follows: Departments of State, Army, Navy, Air Force, Commerce, and the Civil Aeronautics Board.

4. The recommendations of the Committee are implemented by the Aircraft Production Resources Agency of the Department of Defense which allocates controlled materials as required to the manufacturers included in the air-carrier program.

5. The extension of the Defense Production Act of 1950, as amended, extended controls for the maintenance of military production. Therefore, continuation of the established policy of the Committee for civil air-carrier-type aircraft to be produced on an equal priority with similar military type is necessary in order to maintain air-carrier operations essential to the civil economy and, in addition, to provide an airlift potential in support of mobilization planning.

6. The non-carrier aircraft production program (industrial, business, and agricultural) under the Defense Materials System, effective July 1, 1953, is no longer eligible for allocation of controlled materials due to the easing of certain materials' shortages. Nevertheless, the production of this important segment of the aircraft industry, representative of small business, should be considered in evaluating the overall civil aircraft production essential to the defense effort. The manufacturers of noncarrier aircraft have submitted their production program covering the next 30-month period from October 1958 through March 1961 as follows:

Fourth quarter, 1958	2,120
Four quarters, 1959	8,483
Four quarters, 1960	8,521
First quarter, 1961	2,283

7. There are no major problems with regard to coordination under the Defense Production Act.

8 and 9. The Air Coordinating Committee, in furtherance of its policy of equal priority for the production of similar civil-military type aircraft, will continue its coordination and development of programs to meet civil aviation requirements, both foreign and domestic, which are found to be essential to the civil economy and in support of the defense effort for any future emergency.

10. There were no changes in organization during the past year.

11. The availability of funds is not essential to carry out the Committee's recommendations with regard to equality of priorities for the production of civil air-carrier-type aircraft.

12. See item 5 above.

13. No recommendations were received from the Joint Committee on Defense Production.

14. The Air Coordinating Committee is prepared to consider any other problems that may arise requiring coordination or development of integrated policies pursuant to its responsibilities under Executive Order No. 10655, January 28, 1956 (21 F. R. 665).

It is believed that the foregoing information and comments adequately cover the activities of the Air Coordinating Committee with respect to the Defense Production Act during the past year.

I trust this information is satisfactory for your purpose in preparing your report for the House of Representatives and the Senate. If the Committee can be of further assistance, please let me know.

If further information is desired, Mr. Robert R. Reining may be contacted on code 112, extension 2937.

Sincerely yours,

E. R. QUESADA, *Chairman.*

EXPORT IMPORT BANK

EXPORT-IMPORT BANK OF WASHINGTON,
Washington, D. C., August 27, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Washington, D. C.

(Attention: Mr. Harold J. Warren, clerk and counsel.)

DEAR SENATOR ROBERTSON: I am pleased to enclose the information pertaining to the operations of the bank under the Defense Production Act during the past year, as requested in your letter of August 14, 1958.

In the event any further information is desired, I shall be happy to furnish it.

Sincerely yours,

LYNN U. STAMBAUGH,
First Vice President.

LENDING ACTIVITIES OF THE EXPORT-IMPORT BANK UNDER THE DEFENSE PRODUCTION ACT

The Export-Import Bank was named in section 311 (a) of Executive Order No. 10161, as amended by Executive Order No. 10281 of August 28, 1951, as the agency designated to make and administer all loans under section 302 of the Defense Production Act of 1950, as amended, where the expansion, development, or production so financed is carried on in foreign countries. Executive Order No. 10480 of August 15, 1953, which superseded the above orders, retained section 311 unchanged, except for inclusion of the additional authority to guarantee loans for expansion, development, or production in foreign countries. By means of the credits authorized, new sources have been provided of copper, cobalt, manganese, molybdenum, and zinc for the United States stockpile or use by United States industry.

The bank has the responsibility for all financial aspects of loans made under section 302 of the Defense Production Act of 1950, as amended, for activities carried on in foreign countries. Such loans are made by the bank only upon

a certificate of essentiality of the loan issued by the Director of Defense Mobilization or the General Services Administration.

Funds disbursed under these loans are made available to the bank by allocations, from the Office of Defense Mobilization, to borrow from the Treasury Department under the authority contained in section 304 of the Defense Production Act of 1950, as amended. Amounts allocated for this purpose reached a maximum of $135 million on February 16, 1953, which was reduced to $50 million on February 4, 1954, and $35 million on June 20, 1958.

Letters of understanding have been exchanged with the Director of Defense Mobilization and the Defense Materials Procurement Administrator, now succeeded by the General Services Administrator, recognizing and expressing the cooperative relationship existing with the bank in the conduct of these lending operations abroad.

All credits previously authorized were fully disbursed as of June 30, 1958. No additional credit authorizations by the bank under the Defense Production Act are contemplated in the future.

No certificates of essentiality were received and no new loans were authorized under this authority during the fiscal year ending June 30, 1958. Information on the loans previously authorized is as follows:

Summary of operations—Defense Production Act

[In thousands of dollars]

Country, obligor, and product	Credits previously authorized	Operations during fiscal year ending June 30, 1958			Unpaid loan balance outstanding June 30, 1958
		Amount disbursed	Principal repaid	Interest collected	
Brazil: Industria e Comercio de Minerios, S. A., manganese	[1] $16,283.0	$28.1		$710.0	$16,283.0
Haiti: Cotes de Fer Corp., sisal	202.3				31.9
Mexico: Zinc Nacional, S. A., zinc	337.5				0
Canada:					
Campbell Chibougamau Mines, Ltd., copper	5,500.0				0
Molybdenite Corp. of Canada, Ltd., molybdenum	540.0		$81.0	3.3	0
Africa, Northern Rhodesia: Rhodesia Congo Border Power Corp., Ltd., copper and cobalt	22,400.0		4,071.2	957.5	16,059.9
Total	45,262.8	28.1	4,152.2	1,670.8	32,374.8

[1] Being that part of $71,346.3 credit authorized Sept. 4, 1952, certified to Eximbank by DMPA, $55,063.3 of which is a direct loan by Export-Import Bank.

The bank is furthering its plans and preparations for the continuity of essential functions and the performance of mobilization functions in the event of an emergency, pursuant to authority given in a letter from the Director of the Office of Defense Mobilization dated September 6, 1957. Accomplishments under this program are set out below:

1. Establishment of a relocation site where the bank's indispensable records are stored and where, in cooperation with the Department of State, the bank's emergency functions can best be performed.
2. Establishment of an emergency order of succession of management.
3. Designation of the key officials who would staff the relocation site when deemed appropriate to do so.
4. Designation of the additional personnel required to support the bank's operations administratively at the relocation site in an emergency.
5. Designation of officials responsible for liaison with the Office of Civil and Defense Mobilization, for the logistical aspects of emergency relocation planning, and for the program and functional aspects of the bank's emergency mission.

FEDERAL HOME LOAN BANK BOARD

FEDERAL HOME LOAN BANK BOARD,
Washington, D. C., September 10, 1958.

CHAIRMAN, JOINT COMMITTEE ON DEFENSE PRODUCTION,
Washington, D. C.

(Attention: Mr. Harold J. Warren, clerk and counsel.)

DEAR MR. CHAIRMAN: In response to your letter of August 14, 1958, the Federal Home Loan Bank Board submits the following summary of its operations under the Defense Production Act:

1. The Federal Home Loan Bank Board (hereinafter referred to as the Bank Board) will be responsible for the development of national security preparedness measures relating to savings and loan credit policies and programs. The Bank Board will cooperate in this work with the Federal Reserve Board to the extent necessary to reflect Bank Board views and insure general coordination of savings and loan credit policies and programs with basic national policies under conditions of mobilization. Likewise, with the cooperation of the Department of the Treasury, the Bank Board will develop national security preparedness programs relating to the operations of the Federal Home Loan Bank System (hereinafter referred to as the bank system).

2. The authority from which the Bank Board derives its powers for such programs is "Defense Mobilization Order I–22, dated March 28, 1956."

3. Among the measures for which the Bank Board will be responsible are the following:

(*a*) Development of plans and regulations with respect to the bank system for appropriate general and selective credit controls to curb inflationary pressures during various types of mobilization emergencies.

(*b*) Preparation, in cooperation with the Department of the Treasury, of plans for availability of savings and the provision for essential credit to the members of the bank system under conditions of attack.

(*c*) Development of plans to encourage preparedness measures by the members of the bank system designed to support continuity of operations of the system in the event of enemy attack, including the preservation of essential records.

(*d*) Development and maintenance of specific plans to assure the continuity of the essential functions of the bank system in the event of an attack on the United States.

Such preparedenss measures will be undertaken on a basis consistent with defense mobilization assumptions and objectives for the Government as a whole. To assure such consistency and coordinated planning, proposed programs will be submitted to the Director of the Office of Defense Mobilization or developed jointly.

4. The effectiveness of each program, as demonstrated in Operation Alert 1958, were:

(*a*) Withdrawals and improper use of credit were theoretically controlled under applicable provisions of the Federal Home Loan Bank Board's Emergency Regulations Nos. 1 through 9, as published in the Emergency Federal Register, volume 23–Opal, No. 3 (Supp. II), dated July 2, 1958. In several instances regional Federal home-loan banks made advances to member institutions to meet emergency needs of the public. No guaranties of such credit were available. It is recommended that provision be made for guaranty of solvency and indemnification by the Federal Government of all financial institutions during emergency periods.

(*b*) Operational readiness effectiveness could be improved by wider and more advanced distribution of data from the damage reporting systems to regional elements. Consideration might be given to dissemination of this material through regional civil-defense offices.

(*c*) Mutual contacts are essential for effective operation of preparedness measures of the bank system and, therefore, suggest that the 11 regional Federal home-loan bank presidents be included as members of regional mobilization committees or the equivalent.

5. The current need for these programs is to prepare the savings-and-loan industry for defense mobilization in concert with the program of continuity of Government operations.

6. The Bank Board has no programs related to small business.

7. Major problems confronting the Bank Board in carrying out mobilization programs are the absence of determination and announcement by the Federal Government that it would—

(*a*) Make available sufficient currency or its equivalent to surviving financial institutions, including savings and loan associations, to enable them to operate within the framework of such emergency regulations as have been and may be promulgated;

(*b*) Indemnify such institutions at least against losses incurred as the result of payments made, as receiving and paying agents, to holders of savings accounts in incapacitated or inaccessible institutions; and

(*c*) Sustain the Federal Savings and Loan Insurance Corporation in meeting its insurance obligations.

8. Changes in mobilization planning and readiness measures to meet future emergencies could be improved through wider and more advanced dissemination of damage assessment data to field elements.

The regional Federal home-loan banks have in the past operated from their home offices under assumed relocation site conditions. Operation of regional Federal home-loan banks from actual relocation sites, which is anticipated in the future, will be a better test of operational capability.

9. The programs outlined in 1 and 3 above are standby programs and would be activated only in the event of emergency. The Board is, however, planning for the continuity of its operations should an emergency occur.

10. The Federal Home Loan Bank Board has made no organizational changes during the past year.

11. Future objectives:

(*a*) Finance: A proclamation, an Executive order, or the establishment of a new corporation which would provide for solvency and indemnification by the Federal Government of all financial institutions during an emergency.

(*b*) Physical safety: The structure of buildings presently occupied by the Bank Board at its relocation site would not withstand attack conditions. Operational capacity would be improved by the construction of specially designed attack-proof buildings or shelters; adequate emergency supplies, such as food, water, and medical supplies; considering the welfare of families of personnel engaged in working at relocation sites during an emergency; placing emphasis on cooperation and coordination of Federal, State, and local facilities.

(*c*) Communications: During Operation Alert 1958, due to road construction in the area of the Bank Board's relocation site, the breakdown of the single available cable necessitated the emergency installation of radio transmitters. It is recommended that radio transmitters be provided on a standby basis.

(*d*) General: In the near future all levels—departmental and field—should be fully informed and capable of operating from relocation sites in a unified program.

12. Up to the present time it has not been necessary for the Board to request a special authorization of funds for defense needs. Funds to date for these expenses have been obtained directly or indirectly from the savings and loan industry.

13. The Joint Committee on Defense Production has made no recommendations to the Federal Home Loan Bank Board.

Very truly yours,

HARRY W. CAULSEN, *Secretary.*

HOUSING AND HOME FINANCE AGENCY

HOUSING AND HOME FINANCE AGENCY,
OFFICE OF THE ADMINISTRATOR,
Washington, D. C., September 3, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Washington, D. C.
(*Attention: Mr. Harold J. Warren, clerk and counsel.*)

DEAR MR. CHAIRMAN: This letter is in response to your request of August 14, 1958, for a summary of the mobilization activities of the Housing and Home Finance Agency for the past year. We assume that in accordance with established precedents, the joint committee desires the Agency's report to include all

major defense mobilization and civil defense activities carried on by the Housing and Home Finance Agency.

The Housing and Home Finance Agency's authority in these areas derives from Defense Mobilization Order I–14 issued by the Office of Defense Mobilization on November 26, 1954, and responsibilities assigned to the Agency by the Federal Civil Defense Administrator under FCDA Delegation No. 2 dated September 8, 1954. The latter delegations were clarified in a memorandum of understanding between FCDA and HHFA signed January 23, 1957. Since the issuance of DMOI–14 and FCDA Delegation No. 2, the Office of Defense Mobilization and the Federal Civil Defense Administration have been merged to form the new agency designated the Office of Civil and Defense Mobilization. The delegations of authority and responsibilities previously issued have been continued in effect by the Director of the new Agency.

The major activities of the Housing and Home Finance Agency during the past year have been directed toward the following broad program objectives:

1. To plan the role of the Housing Agency in providing emergency lodging and related community facilities in the period following a nuclear attack upon the United States.

2. To develop technical bulletins for, and lend leadership and guidance to, the State and local civil defense organizations on billeting refugees in reception or support areas should an attack occur.

3. To develop plans for the provision of housing and community facilities in the recovery period to serve the needs of the civilian population, defense industries, and atomic and military installations.

4. To further the operational readiness of the Agency by advance determinations re (*a*) curtailment or termination of nonessential programs; (*b*) designation of key personnel for the emergency housing program; (*c*) organizational structure of the emergency housing agency; (*d*) relocation of personnel and records to nontarget areas; (*e*) appointment of executive reservists; (*f*) provision of an order of succession to the position of Administrator and to the positions of regional administrators to assure continuity of executive direction.

In seeking to attain these objectives, the Agency has engaged in the activities briefly described below:

(*a*) The Defense Planning Branch has continued the supervision and coordination of all HHFA civil defense and mobilization activities. Coordination is effected principally through the HHFA Defense Council which is composed of the defense planning coordinators of all constituent units and agencies. Regional defense planning committees, instituted in 6 of the Agency's 7 regional offices (the seventh region, recently established in Puerto Rico, will have a similar committee in the near future) provide the medium for direction and coordination of regional activities.

(*b*) Key personnel within the Agency have been selected and a system established for notification in case of emergency.

(*c*) The relocation site for the Washington office has been prepared to accommodate the selected personnel, physical and security requirements established, essential records have been stored there and training of communications staff for permanent assignment at the site is in progress.

(*d*) Relocation sites have been selected for 6 regional offices and during Operation Alert 1958 all 6 were activated.

(*e*) Twenty-one executive reservists have been designated. Indoctrination courses have been started and 16 of the reservists either participated in the Opal, 1958, exercise at the relocation site or were briefed on the site at the conclusion.

(*f*) The Agency is represented on and participates in the decisions of the Civil and Defense Mobilization Board.

(*g*) The Agency participated in Operation Alert 1958.

(*h*) HHFA serves on many OCDM committees and working groups such as the mobilization plans group, the Interagency Planning Group and Manpower Policy Committee. Thus the Agency has been able to relate its own planning in the housing and community facilities area to the programs developed in other fields such as production, manpower, economic stabilization, and the like.

(*i*) Emergency plans for varying mobilization conditions have been reviewed and revised in the light of changing assumptions made necessary by technological developments.

(*j*) An improved organizational structure for the emergency housing agency has been devised and successfully tested during Operation Alert, 1958.

(*k*) Several forms and procedures required for the administration of the emergency programs have been outlined.

(*l*) An outline for a national housing program for use in a civil defense emergency has been developed.

The Housing and Home Finance Agency has now identified its assignments and responsibilities but is in need of funds for the implementation of its program. In the past year, no funds were made available to the Agency for these activities from any source. Funds requested by FCDA for delegate agency functions during fiscal 1959 were severely reduced by the Congress, and it now appears unlikely that we will be able to carry out the program of work which we had planned for this year.

If you wish any further information covering the defense planning activities of the Housing and Home Finance Agency please call upon us and we shall be happy to supply it.

Sincerely yours,

ALBERT M. COLE, *Administrator.*

ATOMIC ENERGY COMMISSION

ATOMIC ENERGY COMMISSION,
Washington, D. C., September 9, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
United States Senate, Washington, D. C.
(Attention: Mr. Harold J. Warren.)

DEAR SENATOR ROBERTSON: This is in reply to your letter of August 14, 1958, addressed to the Chairman, United States Atomic Energy Commission, requesting, for inclusion in the Eighth Annual Report of the Joint Committee on Defense Production to the Congress, a brief summary of operations of the AEC under the Defense Production Act for the past year.

PRIORITIES AND ALLOCATIONS

The Business and Defense Services Administration (formerly NPA) Delegation 2, as amended, July 27, 1951, delegated (with power of redelegation) priorities and allocations authority to the Atomic Energy Commission. The delegation authorized the AEC to apply ratings and allotment numbers, as appropriate, on orders for delivery of products and materials needed for the accomplishment of approved programs; to assign to others (contractors) the right to use ratings and allotment numbers on purchases for the account of the AEC; and to provide priorities and allocations assistance to other AEC contractors, except suppliers of electric power services, for use in connection with certain procurement for their own account.

The rules and regulations issued by BDSA require identification of all purchase orders for materials needed to meet AEC contracts and subcontracts. This requirement is mandatory and not optional. Accordingly, rated orders or authorized controlled materials orders, as appropriate, are used for all procurement by or for the account of the AEC of products and materials that are subject to the provisions of the priorities and allocations system.

DX ratings are used to identify orders for those programs designated as eligible for DX program rating by the Director of the Office of Civil and Defense Mobilization (formerly Office of Defense Mobilization) and DO ratings are used for the other AEC programs.

The priorities and allocations system is administered within the AEC in accordance with AEC priorities and allocations series bulletins and supplements issued to all offices and divisions, headquarters, and to managers of operations. These bulletins establish basic AEC policies and procedures and implement BDSA policies and procedures.

The AEC contractors develop estimates of controlled materials which are reviewed for reality and time phasing by the operations offices prior to submittal to headquarters. Headquarters coordinates the program and presents the AEC requests for allotments to the Office of Civil and Defense Mobilization (OCDM).

Upon receipt of the allotments from OCDM, distribution is made to operations offices and other elements of AEC that are responsible for placing delivery orders for products and materials for AEC programs.

Allotment accounts are maintained throughout the AEC to assure that allotment usage does not exceed the allotments received.

Under DMS, the AEC is the claimant agency before the OCDM for allotments of controlled materials for its own programs and by designation from OCDM and BDSA, the AEC is also the claimant agency for the Canadian atomic energy program. The BDSA is the allotting agency for the latter program.

The priorities and allocations system has been extremely helpful in providing preferential treatment to AEC orders for materials and products. However, occasions do arise when the AEC or its contractors experience difficulties in placing orders or in obtaining required deliveries on schedule. In such cases, if AEC efforts to resolve the problems involved are unsuccessful, special assistance is requested from BDSA. In rendering this assistance, BDSA may issue a specific DX rating or directive on the supplier.

MOBILIZATION READINESS ACTIVITIES

The AEC continued full cooperation with the Office of Civil and Defense Mobilization in implementing the various mobilization readiness plans. Adjustments were made in the number of AEC-owned machine tools reported to the defense mobilization production equipment inventory to reflect additions and withdrawals; alternate suppliers were added to the mobilization base; AEC internal standby instructions, based on emergency standby regulations and orders of OCDM, were reviewed and updated; and major emphasis was placed on full participation by the AEC in all Operation Alerts.

Data were furnished to the National Damage Assessment Center on selected AEC installations and key suppliers for an initial test of the program.

ASSISTANCE TO SMALL BUSINESS

Authority

AEC has established small-business policies and program requirements in order to discharge its responsibility to small business pursuant to the authority of the Small Business Act of 1953, as amended, and the Defense Production Act of 1950, as amended. Since AEC is concerned with the construction and operation by cost contractors of chemical and metallurgical plants and research facilities of various types, the AEC small-business program, while it includes prime contracts, is focused primarily on the subcontract actions of its cost contractors.

Summaries of activities

AEC operations and contractor purchasing offices continue to maintain and operate small-business programs, as required by AEC policies, to insure that small business receives a maximum practicable opportunity to participate in procurements that are suitable for small business. The continued effective operation of these programs has been ascertained through periodic management reviews, quarterly small-business reports of purchasing office activities and quarterly statistical reports of prime and subcontract awards to small business. The names of a substantial number of additional small-business suppliers of goods and services are continually being added to the source lists of AEC operations and contractor purchasing offices. Small-business concerns are participating in a majority of the contract actions which are suitable for small business and are receiving a substantial number and dollar volume of the related subcontract awards. This is evidenced by the fact that 39.3 percent of the $550 million total AEC subcontract dollars went to small business during fiscal year 1958.

The maintenance of a cooperative working relationship with the Small Business Administration is an important feature of the AEC small-business program. As in prior years, this cooperation has featured AEC participation in SBA small business opportunity meetings. These meetings have been held throughout the country and, on approximately 15 different occasions, AEC contractors have exhibited items which they purchase in connection with the construction and operation of AEC plants or the performance of AEC research programs.

A revised edition of Selling to AEC was published in April 1958 since the availability of up-to-date information about doing business with AEC is an integral part of the AEC small-business program. The publication lists the names and addresses of all AEC operations and cost contractor purchasing offices and includes other helpful information regarding the sale of goods and services. This revision of Selling to AEC was expanded to include information which will be helpful to the business concerns that are interested in selling goods and services outside the AEC program relative to the peaceful uses of atomic energy.

V-loan program

During fiscal year 1958, the AEC extended for 1 year the maturity of a current guaranteed loan, increasing the maximum credit from $85,000 to $110,000, but retaining 75 percent guaranty or $82,500.

Accelerated tax amortization

The Office of Civil and Defense Mobilization refers to AEC for evaluation and comment certain applications and other matters relating to certificates of necessity. During fiscal year 1958, AEC commented to OCDM on 16 such matters.

Sincerely yours,

JOHN A. DERRY,
Director, Division of Construction and Supply.

SMALL BUSINESS ADMINISTRATION

SMALL BUSINESS ADMINISTRATION,
Washington, D. C., September 15, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
Congress of the United States, Washington, D. C.

DEAR SENATOR ROBERTSON: In response to your request of August 14, 1958, I am pleased to enclose a report of our activities relating to the administration and execution of mobilization programs. This report covers operations for fiscal year 1958.

Sincerely yours,

WENDELL B. BARNES, *Administrator.*

I. INTRODUCTORY REMARKS

Positive measures to provide managerial and technical aids to small business and to assure that small firms have equal opportunities to participate in Government contracts for supplies and services are the broad objectives of the Small Business Administration's programs of procurement and technical assistance for small business. This summary statement will highlight the activities undertaken in connection with these programs. Also highlighted are specific accomplishments. Basic statistics covering the procurement and technical assistance programs are included in the exhibits to this statement.

The Small Business Act of 1953, as amended, provides the foundation of a national program for small business concerns, based on a policy enunciated by Congress. The stated objective of this policy of Congress is the preservation of free, competitive, small-business enterprise, and insuring that a fair proportion of Government purchases of supplies and services is placed with small business, and that the Government will aid, counsel, and assist and protect, insofar as possible, the interest of small business.

The Small Business Administration is primarily a service organization, providing financial, procurement, managerial, and technical assistance to individual small businesses requesting such aid.

In setting forth that the Small Business Administration was established to carry out the policy of Congress in order that "* * * the interest of small-business enterprises may be recognized, protected, and preserved * * *" it was indicated that the Small Business Administration should consult and cooperate with other Government departments and agencies. The act, and hearings and reports preceding this legislation, clearly indicated that the intent of Congress

is to make the Small Business Administration the spokesman for small business in the establishment of policy and an advocate in the correction of particular problems of small business.

To carry out this policy, Congress provided specifically for certain programs wherein the SBA exercised complete control. In other instances, the Agency is not given complete jurisdiction but is directed to cooperate and consult with other agencies of the Government.

The Small Business Act of 1953, as amended, gives the Small Business Administration, itself, the authority, in addition to making business and disaster loans, to (1) determine and cooperatively set aside for award to small firms, all or any part of a proposed procurement; (2) provide technical and managerial aids to small firms; (3) enter into contracts with Government procurement agencies; (4) make an inventory of all production facilities of small firms; (5) certify as to capacity and credit to perform a specific Government procurement contract; and (6) certify as to size of business concerns.

The SBA is directed to consult and cooperate with other agencies and to recommend policies which would be beneficial to small firms; to consult and cooperate with officers of the Government having procurement powers; to encourage the letting of subcontracts by prime contractors; to make studies and recommendations to appropriate agencies to insure that a fair proportion of total purchases and contracts be placed with small-business enterprises; to consult and cooperate with all Government agencies for the purpose of insuring that small-business concerns receive fair and reasonable treatment; and to make recommendations concerning the effect of price, credit, and other controls imposed on small business under war or defense programs.

By drawing on the technical staff and research facilities of other Government departments, the SBA is placed in the position to render an effective job of helping small business without duplication of efforts on the part of either the SBA or other Government departments.

Furthermore, this cooperative undertaking with respect to various Government departments and agencies—and particularly with reference to activities of procurement and managerial and technical aids—provides tangible evidence that the Small Business Administration is directing its program activities to bring about close and cooperative working relationships in recognition of the intent of Congress.

11. PROCUREMENT AND TECHNICAL ASSISTANCE ACTIVITIES

Exhibit A provides a summary of progress and accomplishments of the Small Business Administration. This summary shows the results of programs for fiscal year 1958 and the cumulative results since the agency started operations in August 1953. The details relative to programs are discussed in a later part of this report.

In brief, exhibit A indicates the following accomplishments during fiscal year 1958:

(*a*) A total of 17,819 procurements valued at $1,062,454,031 were jointly set aside for competitive award to small-business firms.

(*b*) Small firms were notified of 32,185 opportunities to bid on procurements selected as suitable to their industrial facilities.

(*c*) A total of 3,021 calls and visits were made to prime contractors to develop subcontract opportunities for small-business firms.

(*d*) As the result of these visits to prime contractors, 6,474 subcontract opportunities were referred to small-business firms.

(*e*) A total of 24,848 cases of procurement assistance counseling and representation to procurement agencies in behalf of small firms were handled by agency field offices.

(*f*) A total of 7,701 small-business firms were helped to bid on specific procurements.

(*g*) A total of 11,446 calls or visits were made to small-business firms to notify them of items or services being purchased for which additional small-business competition was desired.

(*h*) One hundred and fifteen certificates of competency were issued to small-business firms enabling them to receive awards totaling $26,077,582 on procurements for which their production capacity or credit had been questioned by procurement officials.

(*i*) Six hundred and ninety-nine visits were made to small-business plants by production engineers of the agency to assist in the progress of completing contracts on which certificates of competency had been issued.

(*j*) A total of 4,879 engineering surveys of small-business plants were made in connection with loans, certificates of competency, and preaward surveys.

(*k*) A total of 3,596 cases of production and management assistance, including materials and equipment assistance, were given to small-business firms.

(*l*) A total of 6,540 requests for products assistance were handled.

(*m*) A total of 1,341 inventions were listed in the agency's products list circular to bring to the attention of the small-business man new merchantable ideas.

(*n*) A total of 2,946 requests were received for information and data on inventions listed in the products list circular.

(*o*) One hundred and fifty-five administrative management courses to assist small-business owners were conducted by 97 leading educational institutions in cooperation wtih the SBA. They were attended by more than 5,400 small-business executives.

(*p*) A total of 498,865 Management Aids, 162,785 Technical Aids, and 500,295 Small Marketers Aids were distributed free to small-business executives, trade associations, educational institutions, and professional organizations, highlighting effective policies and procedures for small-business owners and managers.

(*q*) The total 84,768 copies of Small Business Management series were sold or distributed free to businessmen, educators, professional experts, Government specialists, and others.

(*r*) Sales of Management and Technical Aids annuals totaled 17,650, with 1,061 distributed free.

III. PROCUREMENT ASSISTANCE TO SMALL BUSINESS

Progress has been made by the Agency to strengthen and expand the programs of aiding, counseling, and assisting small-business concerns to participate in purchases and contracts for supplies and services for the Government. The SBA recognizes fully, however, that the optimum results with respect to assistance to small business in achieving a fair proportion of Government contracts and in participation in subcontracting opportunities still remains to be obtained (exhibit A).

The most persistent problem continues to be how best to divide the available manpower in order to meet all of the many requests arising throughout the country for this assistance and to fulfill the various functions required in extending procurement assistance to small firms.

A. Joint set-asides for small-business concerns

It is recognized that this program has not reached its full potential. The basic problem is that of coordinating small-business programs with the primary responsibility of the purchasing offices. Therefore, the problem is one of continued education.

Nevertheless, Government purchases totaling $1,062,454,031 were set aside for competitive award to small-business concerns during fiscal year 1958. This was the greatest dollar value of purchases set aside for small business for any fiscal year since the beginning of the Agency. In fiscal year 1957, purchases totaling $744,335,298 were jointly set aside for small business as compared to purchases valued at $497,678,432 in fiscal year 1956.

The joint set-aside program is carried out by the SBA in cooperation with those Government agencies which account dollarwise for most of the Federal Government's purchases. Section 214, Public Law 163, as amended, empowered the SBA and Government contracting officers to set aside proposed procurements for competition among small-business concerns when such action was in the interest of maintaining or mobilizing the Nation's full productive capacity, or in the interest of war or national-defense programs.

The program is directed toward the discharge of their common responsibilities that a fair proportion of total purchases and contracts for supplies and services of the Government shall be placed with small business concerns.

To carry out the joint set-aside program, the Small Business Administration assigns representatives to the major Government purchasing offices. There, in cooperation with procurement officials, they jointly screen proposed purchases, determine whether small firms can supply the items or services, and evaluate the small-business competition. When the Small Business Administration representative determines that sufficient small business competition can be obtained, he recommends that the procurement be totally or partially set aside for competitive award to small-business concerns. If this request is denied, he has the right to formally appeal the decision.

When an entire procurement is restricted to small-business firms, that is, set aside for exclusive award to small business, any bids received from large business concerns are considered as nonresponsive. Where only part of a proposed purchase is set aside for small business, small firms compete with all other businesses that bid on the contract, large and small, for the non-set-aside portion of the procurement in order to be considered for negotiation of the set-aside portion. To qualify for negotiation of the set-aside portion, the bid entered by a small-business firm must be within 120 percent of the highest unit price at which the award is made for the non-set-aside portion. Negotiation is then conducted with the small-business firms which are determined to be responsive and which qualify under the 120 percent rule, beginning with the firm which submitted the lowest bid on the non-set-aside portion. When only one award is made on the non-set-aside portion, the set-aside portion much be awarded at the same unit price. When the non-set-aside portion results in multiple awards, the set-aside portion is awarded at a unit price equal to that of the highest price awarded on the unrestricted portion.

The SBA set-aside porgram assures that small firms will be awarded contracts on those procurements earmarked for exclusive award to small business. Furthermore, when a proposed procurement is set aside on a partial basis, the opportunity for awards is, in fact, double; one with respect to the set-aside part, and one with respect to the non-set-aside portion. It further gives small business the opportunity to bid or quote on smaller quantities, since the partial set-aside action has the effect of dividing the procurement into at least two parts. This program serves to strengthen the national economy inasmuch as it broadens the procurement base for the Government by encouraging small business participation in Government contracts.

Since the beginning of the SBA joint set-aside program in August 1953, 41,290 procurements valued at $2,919,582,709 have been earmarked for competitive award to small-business concerns.

The progress made in the joint set-aside program is illustrated in exhibit B by the increase in the numbers and amounts of the set-asides initiated and agreed to by procuring officials.

Accomplishments under the joint set-aside program are dependent to a considerable extent upon the number of purchasing offices which can be covered by SBA representatives. During the last half of fiscal year 1958, 37 SBA representatives carried on the program regularly in 26 Army purchasing offices, 21 Navy installations, 16 Air Force establishments, and 27 Federal civilian agency purchasing offices.

As manpower would permit, liaison also was maintained at 140 other procurement offices which do a lesser volume of purchasing. In order to provide the greatest assistance to small business with the personnel available, however, the Agency's main effort has been concentrated in the larger purchasing installations.

During fiscal year 1958, set-asides were made in cooperation with the following agencies in the amounts indicated: Army, $436,999,812; Navy, $381,226,811; Air Force, $192,973,955; Department of Commerce, $24,934,561; General Services Administration, $13,591,673; Veterans' Administration, $6,609,353; Post Office Department, $1,222,450; Department of the Interior, $1,774,149; and Department of Agriculture, $3,021,267. The purchasing offices of the latter two departments are so widely decentralized that SBA representatives are only able to screen a minor portion of the procurement placed.

In addition to carrying on the set-aside program, SBA representatives at the procurement centers counsel owners and officers of small concerns in selling to all Government agencies. They also assist specific small-business concerns to obtain an opportunity to bid on various procurements of which they otherwise would be unaware.

B. Guiding small firms to areas where competition is needed

A program which supplements that of restricting procurements for award to small-business concerns is that of locating competent small-business suppliers for those items or services for which small-business competition has been inadequate or lacking. When SBA representatives at purchasing offices screen procurements for possible set-aside action, all possible information is obtained concerning past procurement history and the prospects for small-business competition on each procurement being examined. When the SBA representatives learn that an item or service can be supplied by small-business firms, but that there has been little or no competition from them, arrangements are made for

SBA field offices to locate competent suppliers for the particular item or service and purchasing office. All essential data and information concerning the item or service, including drawings and specifications, are forwarded to the Agency's field offices in order that SBA engineers and industrial specialists match this basic information with the Agency's facilities register of small firms which are competent to supply the item or service and which wish to bid.

This systematic action not only increases small-business competition and broadens the industrial base, but also has the effect of assuring a better price to the Government because of greater competition. It also increases the number and variety of items and services on which joint set-asides for small-business firms may be made. As an example, some of the items on which the Agency was able to obtain joint set-asides during the past 6 months because action had been taken to find competent small-business firms desirous of bidding in the areas in which competition was needed are: maintenance and repair of furniture; space heaters; steel washers and nuts; preformed rubber packing; security alarm systems; steel shelving; plastic drinking cups; steel bunks; wood and metal furniture; electric blankets; pasteboard targets; hoisting refuse containers; reconnaissance boats; rotary sweepers; operating gowns; tension guys; microwave tubes; walk-in refrigerators; rigid radomes; mobile meal carts; aluminum folding chairs; electrical wire; fueling and defueling systems; repair of water tanks; auto soap; aircraft engine overhaul; refuse collection disposal; janitorial services; map paper; jet engine overhaul; playout reels for aircraft; prefabricated buildings; valves; capacitors; compressors; boats; vibrators; interrupters; envelope bags; structural steel fabrication; photographic supplies; electronic trainers; and maintenance and repair of elevators.

C. Inventory of small plant facilities

An inventory of small-business productive facilities is maintained on a decentralized basis in the field offices. Small companies interested in registration are furnished a questionnaire on which they list facilities and other pertinent information. On receipt of a questionnaire by the field office, it is filed alphabetically by company name. The most important data are reviewed and the company classified by major product or capabilities. The company is then coded for quick identification in accordance with the Standard Industrial Classification.

The purpose of the facilities inventory is to insure that a record is provided for quickly ascertaining the productive capacity of small plants in a given area. The data furnished by the company are carefully classified as to capacity, machine tools, number of employees, types of products, and other essential production factors. This information can then be evaluated to determine a manufacturer's industrial potential, including the kinds of production for which his facilities are now suited, and the types to which the facilities can be converted in case of full mobilization for defense. Many small firms now engaged in producing a peacetime, civilian item, can, when the need arises, produce a wide variety of defense items which have no civilian counterpart.

A partly mechanized operation has been accomplished by the utilization of stencil plates which contain a minimum of identification and descriptive data on the company, and can be used for addressing correspondence to them. From such records, the field staff can readily obtain skeleton information on individual concerns, without going to the main alphabetical files. These condensed records are maintained in SIC code numerical order for rapid reference.

The inventory is now used principally in assisting the registered companies in their efforts to obtain prime and subcontracts, in locating new sources for the military services, in aiding the OCDM-sponsored damage assessment program, and in locating scarce or specialized machine tools and equipment when calls for them are received.

SBA field offices are authorized to cooperate with State and local governments, chambers of commerce, and trade associations in the collection of facility information to expand the facilities inventory and so increase its coverage.

About 39,000 small plants are registered with SBA. A program is now underway to enlarge this total. The increasing importance of the mobilization aspects of the inventory points up the clear need for registering more small firms that are removed from urban centers, and this is now receiving emphasis.

An intense program is underway to register qualified small-business concerns for research and development work. This will be a special inventory group which will receive constant attention so that defense and civilian agencies engaged in this work can be made aware of these facilities during peacetime or mobilization periods, and a fair share of this work channeled to small busi-

ness. This group is the basis for the List of Small Companies for Research and Development Work distributed to procuring agencies and prime contractors. Revisions are made from time to time as required. (This has been an important and active program since the inception of the agency.)

D. Procurement assistance counseling

The Small Business Administration helps small firms determine which items or services they can supply to the Government and which agencies buy them, assists the firms in obtaining listing on the appropriate bidders lists, and helps them obtain bid sets for purchases they are able to supply. The agency is giving particular emphasis to informing small firms interested in doing research and development work how and where to present detailed information about their fields of interest, their research scientists, development engineers and other technical personnel, and their laboratory equipment and research facilities.

In order to provide small firms as full and current information about Government purchasing as possible, the Small Business Administration has revised its United States Government Purchasing Director and United States Government Specifications Directory and published the two in combined form under the title "United States Government Purchasing and Specifications Director." The new and expanded directory provides detailed information on the items and services bought by the Federal Government and the agencies which buy them; sources of specifications used by the agencies in their purchasing; steps to take in locating prime contract and subcontract opportunities; and other helpful data. The directory, which is widely used both in industry and Government, is sold by the Superintendent of Documents.

Many SBA field offices display a limited number of current bid sets for suitable Government purchases and inform interested small firms how copies of the sets and specifications and drawings relating to them can be obtained.

This Agency and the International Cooperation Administration are collaborating to provide small firms information on export trade opportunities. The International Cooperation Administration furnishes SBA field offices with small-business circulars discussing export trade opportunities for small business under the programs financed by the International Cooperation Administration. Small Business Administration field offices use these circulars to inform small firms of needed items, quantities, specifications, and other useful data.

The SBA also assists small firms in solving problems regarding bids and specifications and helps resolve difficulties between small firms and Government procurement officials. During fiscal year 1958 SBA field offices reported 24,848 cases of procurement counselling and representation in behalf of small firms at purchasing offices. In addition, 7,701 firms were helped to bid on specific procurements.

E. Developing subcontracting opportunities for small-business firms

Because of a shift in the nature of defense buying, with greater emphasis on missiles, aircraft, and other highly complex weapons purchased under the weapons system concept, the importance of subcontracting to small-business concerns has increased, and apparently will continue to increase.

The Small Business Administration therefore is intensifying its subcontracting program, tailoring it to the needs of small firms under changed procurement conditions. For example, the Agency recently made available to its field offices and its procurement center representatives, as well as to the military services and congressional committees, a directory, Missile Subcontracting, which contains (*a*) the names of items making up ballistic missiles, guided missiles, rockets, drones, and targets, and (*b*) a list of companies holding contracts for the production of subsystems; components; assemblies, subassemblies, and parts of the missiles, rockets, and so forth. This directory can be reviewed by interested persons at any field office of the Agency.

To carry out its subcontracting program, the Agency compiles data on the facilities of small firms which have asked assistance in obtaining subcontracts. Through use of this data, the Agency is able to recommend interested subcontractors to firms requiring additional production facilities.

Major prime contractors that have agreed to establish small-business subcontracting programs in cooperation with the Department of Defense are consulted by SBA representatives to determine which component parts will be subcontracted. Through its facilities records, the Agency is then able to recommend small firms interested in bidding on these subcontracting opportunities.

The SBA and the Atomic Energy Commission also have established a cooperative subcontract program to help small firms obtain subcontracts from the Atomic Energy Commission's cost-type contractors.

In developing subcontracting opportunities for small business, SBA representatives made 3,021 calls on major prime contractors in fiscal year 1958. As a result, the Agency was able to refer 6,474 subcontracting opportunities to small firms. Statistics on contract awards resulting from this program are not available since the referrals made by the SBA often result, over a period of years, in multiple contract awards which are not reported.

F. Bringing Government purchases to the attention of small firms

When a small concern requests the Agency's assistance in obtaining Government business, it is asked to register its facilities with the appropriate field office. That office then notifies the firm of opportunities to bid on purchases for which its facilities are suited, at the same time urging it to get on the bidders lists so that it will then receive notices of the next opportunities direct from the purchasing offices. Since SBA field offices receive bid sets from many procurement installations, this program enables small firms to learn of bidding opportunities of which they otherwise would be unaware.

During fiscal year 1958, the Agency's field offices made 32,185 referrals of prime contract opportunities to small business concerns.

G. Certificates of competency

The SBA offers what is in effect an appeal procedure for small companies whose low bid on Government procurement has been rejected on the grounds that the firm lacks the necessary financial and productive capacity.

This has been an important and active program since the inception of the Agency. A total of 916 applications was received since August 1, 1953, and 432 certificates of competency were issued through fiscal year 1958. Fiscal year 1958 accounted for 239 applications.

The items for which certificates of competency were requested ranged from wooden tent supports to complex items of military electronic equipment.

Certificates of competency were issued on contracts amounting to $26,077,582 during fiscal year 1958, and on contracts valued at $64,081,165 since the beginning of the Agency.

There was also a substantial increase in the value of the procurement contracts for which applications for certificates of competency were received. The applications in fiscal year 1958 involved procurements totaling $62,562,724, as compared with $39,908,411 in fiscal year 1957, or an increase of 60 percent.

It perhaps should be noted that the very existence of the certificate of competency program has a tendency to tip the scales in favor of a small-business concern when there is doubt existing as to its competency. In many instances, spadework accomplished by SBA field offices has resulted in contract awards without the necessity of the issuance of certificates.

All branches of the Defense Department, some joint agencies, and several civilian agencies were served by this program.

A summary of the origin and disposition of certificate of competency applications from August 1, 1953, through June 30, 1958, is included in exhibit D.

A continual followup is maintained by a qualified SBA production specialist until a certified contract is completed. A status record is also kept in the SBA field office. This is in line with the SBA policy of not only making a careful original investigation, but maintaining a high standard of contract performance. In fiscal year 1958, SBA personnel made 699 such visits to plants. Over 4,000 have been made since the Agency began. An example of field followup action is provided by the history of a small firm manufacturing textile articles for the Quartermaster Corps under SBA certificates of competency. The company's previous experience did not include work related to the production of tents. Considerable difficulties were experienced in training labor and the rejection rate was extremely high. A production specialist from the Washington office helped solve fabrication problems with the result that one contract for tent liners was finished ahead of schedule while the tent contract itself was completed on time. In other instances, SBA production specialists, because of their familiarity with their regions, often suggest small subcontractors who can help in the timely completion of a Government prime contract.

The SBA takes its responsibility seriously when issuing certificates of competency. The care in making investigations and evaluating requests for certifi-

cates of competency is demonstrated by the ratio of certificates issued to applications received. Since August 1, 1953, through fiscal year 1958, 916 applications were received; about 47 percent, or 432 actually resulted in certificates. There are very few instances in which certificates were granted in which the small firm failed to complete the contract.

Behind each issuance of a certificate of competency, there no doubt lies a story of the desire for expansion of a small business in a competitive field and the earnest desire to successfully perform a Government contract.

H. Specifications assistance

A continuing problem of small-business firms is difficulty in obtaining copies of Government specifications. Many small firms receive bids sets from Government contracting officers without the appropirate specifications, or with the basic specification alone, while important reference specifications are omitted. Frequently, when a small firm writes to the purchasing agency for the needed specifications, heavy demand for them already has exhausted the supply.

The SBA maintains at its Washington and field offices a reference set of the packaging and packing specifications most often required by small concerns in selling their products and services to the Government.

During this reporting period, the Agency worked closely with the Task Force for Reviewing Government Procurement Policies and Procedures. Technical guidance was provided to the task force study groups seeking to (1) simplify Government marking, packing, and packaging specifications, and (2) determine whether small business suffers a disadvantage in obtaining the use of Government-owned facilities. In addition, a staff member of the Agency served on the study group dealing with the overall area of Government specifications while another was chairman of an interagency special staff assignment to prepare recommendations to the Government for improving the availability of specifications. The SBA has submited a number of subjects to the study group for consideration and possible solution.

The Small Busines Administration has recently issued the United States Government Purchasing and Specifications Directory, a major section of which is a revision of the United States Government Specifications Directory. The new publication contains a guide to over 900 places throughout the country where small-business owners may refer to Government specifications and indexes; discusses the purchasing specifications used by the Government; tells how businessmen may obtain copies of them; and provides pointers on using them.

In the period from July 1957 through June 1958, the SBA received from the General Services Administration 227 new or interim Federal specifications. These were reviewed by the Agency to make certain their provisions would not be restrictive to small concerns. The Agency's analyses resulted in a number of recommendations to the General Services Administration for deletion of possible restrictive or discriminatory provisions.

The SBA also seeks the issuance of new specifications, or revisions in existing ones, to make it possible for small manufacturers to have their products considered in Government purchasing. Toward this end, negotiations were held during the past year with the Department of Agriculture, Quartermaster Corps, Marine Corps, Coast Guard, Signal Corps, National Bureau of Standards, and the General Services Administration.

Examples of assistance in specification problems are contained in exhibit E.

I. Business opportunity meetings (July 1957 through June 1958)

During fiscal year 1958, the SBA, other Federal agencies, and local business groups cosponsored 19 business opportunity meetings for the benefit of small-business owners and managers. It is estimated that more than 12,375 businessmen attended these meetings and learned of the Government's buying methods, prime contract and subcontract opportunities, and helpful Government services.

Information on selling to the Government was provided by means of talks by top Government purchasing officials, visual displays, sample bid sets, and exhibits of actual articles purchased by the Government.

Each opportunity meeting also featured displays by large prime contractors of items for which they welcomed subcontractors. Purchasing agents were on hand at the displays to discuss their requirements with small firms and to list the firms on their bidders' lists for subcontract work and direct purchases Prime contractors were pleased at their success in finding potential subcontractors or suppliers through these meetings and small firms, in turn, were pleased to have new sales opportunities revealed to them.

Although selling to the Government and subcontract opportunities were highlighted at the meetings, other Government programs for assisting small firms also were stressed. For example, the SBA's programs of financial, production, management, and products assistance were explained at each conference, as well as programs of other agencies.

These meetings were held in the following cities: Atlanta, Ga., Providence, R. I., Fresno, Calif., Denver, Colo., Richmond, Va., Jacksonville, Fla., Akron, Ohio, San Diego, Calif., Topeka, Kans., Erie, Pa., East St. Louis, Mo., Worcester, Mass., Garden City, N. Y., Shreveport, La., Casper, Wyo., Cleveland, Ohio, Buffalo, N. Y., Birmingham, Ala., and Corpus Christi Tex.

It is estimated that 41,000 businessmen have attended these business opportunity meetings since they were begun in fiscal year 1957.

A schedule of approximately 20 small-business opportunity meetings to be held through the Nation is currently being projected for fiscal year 1959.

J. Research and development contracts

Statistics indicate that in the first 11 months of 1958, military research and development contracts awarded to small-business concerns amounted to only 3.2 percent of the value of such contracts. This small percentage of awards to small firms indicates that the scientific knowledge and engineering capacity of small firms are not being utilized by the Government to the fullest desirable extent.

In contracting for research and development work, Federal agencies seek participation by the best qualified firms, educational institutions, nonprofit organizations, or individuals in order to receive the best products or studies. This policy places a premium on experience and on superiority of facilities. The agency asks that purchases of applied research and development projects be set aside for small business whenever two or more small business firms are considered qualified to carry out the project.

Small Business Administration field offices counsel and guide small firms and individuals interested in research and development work and direct them to the appropriate procurement officials. The agency's offices also locate additional small concerns interested in bidding on research and development projects when notified by agency representatives at procurement centers that greater small business competition is needed.

The SBA recently issued a management aid on Research and Development Opportunities in the Federal Government which should prove helpful to small firms desiring such work. This publication describes the steps to be taken by those seeking research and development work with the Government, lists the types of research and development projects contracted for by civilian agencies, and tells which of their offices should be contacted by interested small firms. The SBA also has compiled a list of 1,100 small firms interested in performing research and development work, including their specific fields of interest. These lists have been furnished to Government purchasing offices for use in contacting small firms when projects suitable to their facilities are being considered.

K. Qualified products lists

The Government buys most items on the basis of standard specifications which describe minimum quality or grade, size, and weight, and other characteristics. Certain items purchased by the Government, however, must pass special qualification tests before the procurement is completed. Items which pass the tests are listed in one of the qualified products lists which are used in Government purchasing.

To increase the participation by small business in procurements of qualified products by Government agencies, the SBA issued management aid No. 42, Getting Your Product on a Qualified Products List. This aid is available through all SBA field offices and explains the reasons for qualified products lists and the procedures by which manufacturers can qualify their products.

Small firms interested in selling to the Government a product which must be qualified before a contract can be entered into with the Government should start early on the qualification procedure. The tests are too complex to be accomplished between issuing of invitations for bids and making of awards.

L. Progress payments

The first progress report of the Cabinet Committee on Small Business recommended that the President direct departments and agencies engaged in extensive procurement to adopt procedures designed to (1) insure that a need by a bidder for progress payments or advance payments will not be treated as a handicap

in awarding a contract, and (2) accelerate the making of progress payments to small suppliers when requested.

On November 16, 1956, the Secretary of Defense issued Department of Defense Directive No. 7800.4 which deals with the subject of Defense Contract Financing Policy—Small Business Concerns. The stated purposes of the directive are to insure that a need for progress or advance payments by contractors will not be treated as a handicap in awarding contracts, and to facilitate and speed up the making of progress payments requested by small suppliers under Government contracts. The directive also emphasizes the desirability of providing proper contract financing assistance to small-business concerns by the military.

Similarly, the Administrator of the General Services Administration issued personal property management regulation No. 33 on December 31, 1956. This regulation, directed to heads of all Federal agencies, prescribes basic policies and procedures governing executive agencies in providing contracting financing in the form of progress payments. The regulation applies only to fixed-price contracts for supplies and nonpersonal services other than contracts for construction, or the engineering and architectural contracts pertinent to construction. The regulation states further that to the maximum practicable extent the need for progress payments will not be treated as a handicap in awarding contracts to concerns qualified as responsible suppliers. Prospective contractors deemed reliable, competent, and otherwise responsible will not be regarded as any less responsible because of the need for progress payments. The regulation requires executive agencies to take whatever action is necessary to facilitate and speed up payments on contracts when due.

M. Review of Government procurement policies and procedures

A recommendation of the President's Cabinet Committee on Small Business, established a task force for review of procurement policies and procedures in order to increase small-business participation in work on Government contracts. The SBA has provided technical assistance and has participated in the work of this task force which has as a goal to eliminate needless inconsistencies in the procurement procedures of various departments and agencies; to simplify the procedures; and to remove from them inequities which hinder small-business concerns in their efforts to sell to the Government.

The SBA has referred to the task force typical problems experienced by small firms in selling to the Government, and has recommended possible solutions. The agency has assigned a staff member to the task force on a full-time basis, and has had other of its officials serve as chairmen or members of various task force study groups.

Among other pressing small-business problems submitted to the task force by the SBA were cases of hardship arising from slow payments, and taking of unearned discounts by the Government, and a need for better procedures in Government financing of contracts through progress and advance payments.

As a result of the task force studies, uniform criteria and procedures for progress and advance payments have been developed and legislation proposed to accelerate the making of advance and progress payments requested by small suppliers under Government contract. An SBA official was one of the two draftsmen. It is designed to simplify contracting with the Government by permitting extension to most civilian agencies of a modernized procurement code. It also makes important improvements in connection with the authority to make advance and progress payments and simplifies payroll information required by the Copeland Act of 1934 relating to Government construction and building repair contracts.

Since it removes needless inconsistencies, complexities and inequities in Government procurement procedures, the legislation implements recommendation No. 5 of the President's Cabinet Committee on Small Business, which stated "That the President arrange for a comprehensive review of procurement policies and procedures of all departments and agencies, including the legislation pertaining thereto, with a view to facilitating and extending the participation of small business in work on Government contracts."

The legislation makes five important changes in Government procurement authority and procedures. The first change is made by section 1 which authorizes the Administrator of General Services Administration to extend to civilian executive agencies the flexible procurement procedures employed by the military departments and GSA. This should help eliminate inconsistencies between the purchasing procedures of the various civilian and military agencies which frequently confuse the smaller business concerns.

The second change (secs. 2, 7, and 8) extends to $2,500 the present open market limitations of $500 applicable to most civilian agencies and of $1,000 applicable to several agencies, such as the military and GSA. The change will permit agencies to avoid the formalities incident to advertised purchases when the amount involved is not in excess of $2,500. It is expected that agencies hereafter will place more small orders of this type, which small business concerns can readily accept.

Similarly negotiation of perishable and nonperishable subsistence supplies is authorized by sections 2 and 8. At present only the military departments have authority to negotiate in this area and then only for perishable supplies. Commercial practices in subsistence markets do not fit in with Government advertising requirements. Small business concerns being limited in their resources should be particularly helped by this change.

Improvements in contract financing for small firms should result from granting contracting agencies authority, as provided by sections 4 and 9, to make advance payments in advertised requirements. Sections 5 (b) and 11 authorize these payments to be made on the operating level without the need for approval on the Secretarial level, as is presently required. Sections 4 and 9 also permit both advance payments and progress payments in advertised procurements limited to small business concerns.

The final change is contained in section 12. This eliminates the need for filing formal affidavits of payroll data in Government construction and building repair contracts. This will permit the use of simplified statements.

N. Prime contract authority

The Small Business Administration is empowered to enter into contracts with and department or agency of the United States Government to furnish supplies and services and to arrange for the performance of such contracts through subcontracting to small business concerns or others, as may be necessary.

The SBA believes that its authority to take contracts in order to extend subcontracting should be continued on a standby basis for use in an extraordinary emergency.

O. Examples of procurement assistance

Typical examples of procurement assistance are given in exhibit F.

IV. OTHER PRODUCTION, PRODUCTS, AND MANAGERIAL ASSISTANCE ACTIVITIES

The following discussion pertains to additional facets of the SBA procurement and technical assistance program. All are directed toward helping small firms to overcome the problems of keeping abreast of production and marketing techniques. Coupled with procurement assistance, these activities provide to individual small concerns a means whereby they can (1) gain access to production, research, and development information; (2) obtain current technical data on new or improved products and marketing; and (3) improve their management practices.

A. Assistance to labor surplus areas

SBA assistance to areas of labor surplus and to underdeveloped areas stresses the "building from within" approach; providing counsel and aid to individual small business concerns and directing attention to existing small businesses. This activity serves to augment the area development program of the Department of Commerce, which attempts to bring new industries into such areas. SBA production and industrial specialists call on small business concerns in such areas to explore the possibility of increasing production to absorb some of the available surplus labor. Evaluation conferences are held with the managements of the existing small business concerns, as well as with community leaders concerned with the problems. The possibilities of stabilizing and expanding present local employment, by increasing production and expanding the market for present products as well as by the introduction of additional or new products and by Government prime or subcontracts, are explored.

In response to official requests, staff and field members of the SBA have made a number of industrial potential surveys in areas of labor surplus. In a recent survey of this type the SBA and a State resources and development commission collaborated to explore the possibility of closer cooperation and use of State resources, including advisory services from the State engineering college and of retired industry people who could help management of small concerns at local

levels. This type of arrangement permits the SBA to increase the intensity of coverage of assistance to small business concerns in given areas.

B. Rural development program

The Administrator is a member of the Committee for Rural Development Program of the United States Department of Agriculture, and SBA representatives are active participants in interdepartmental Rural Development Program Committee meetings. In this connection, the agency has made major contributions to local rural development committees in organization, planning, and program implementation.

The agency took part in the national conference on rural development program in Memphis, Tenn., June 16–17, 1958. A total of 300 leaders of national organizations participated in the meetings. Major regional conferences also were attended.

The field office staffs of SBA have participated in the State and county committee meetings, as well as participating in the program at local levels, especially in pilot county areas. Stress has been placed upon assisting small business organizations, on their technical and financial problems, to increase the off-the-farm employment opportunities for farm family members in such areas.

Typical of the assistance given was a survey by agency production specialists of a feed mill in a small southwestern community. It was determined that the management had the know-how and prospective business for a plant twice the capacity of the existing facility. The SBA participated in a loan to the mill and the resultant business brought about an increase in employment to a total of 20 personnel from the original plant employment of only 8.

Some of the services rendered by SBA in the advancement of local development programs, fostering small-business growth and contributing to the increase of off-farm employment are:

1. Counsels with small business concerns on their financial problems, including those located in rural areas and in areas where a declining agriculture has had adverse effects on local economy.
2. Assists small business in obtaining credit from private lending sources.
3. When credit is not available on reasonable terms, SBA extends needed financing to qualified small firms, on medium- or long-term basis, to purchase materials and equipment, to expand and modernize operations for construction or for working capital.
4. Extends credit to local development groups or cooperatives to cover a portion of the costs of constructing buildings for industry.
5. Publishes booklets and business "aids" designed to assist owners and managers in operating their businesses more efficiently.
6. Assists in obtaining Government contracts for businesses as an aid to increased production.
7. Arranges courses, through colleges and universities, which are available to owners of small business concerns providing instruction in business management.
8. Provides counsel to small business concerns and individuals in locating or marketing a new line or type of product, which may include locating someone to make and put it on the market.
9. Provides counsel to small firms having problems of a technical nature, such as production or processing, materials handling, plant layout and related problems, also availability of materials and production equipment.

C. Products assistance program

This service assists small businesses which seek additional products to manufacture or sell. One aid is the Products List Circular, a monthly circular which describes privately owned and Government owned patents which are available for use by others.

On July 1, 1958, there were 14,821 names on the list, representing a gain of 6,821 names during the fiscal year.

During the same period the circular published 1,341 abstracts of available patents on products and processes.

The SBA gave information on 2,946 inquiries from 1,465 small concerns, about the available products, processes, and materials which had been published in the Products List Circular.

The agency's products-assistance program aids small concerns by counseling with them on their specific problems. The advice generally is information about (1) available results of research and development where governmental funds

are used; and (2) practical experience and research and development by private enterprises. Through counseling, products assistance also describes specific situations about a product or industry.

During fiscal year 1958, 6,540 cases were processed. Since the program commenced, 25,353 have been handled. The average is 480 per month.

In previous reports, this agency has described the need of further developing a clearinghouse of information on the results of research and development performed by the Government, or with its funds. To meet this need, additional counseling aids have been given to the field staff. Furthermore, representatives of this agency are members of interdepartmental committees which are coordinating the Government activities in research and development on a specific subject. An example is SBA's participation on the Interdepartmental Committee on Radiation Preservation of Food.

Examples of products assistance to small business firms are given in exhibit G.

D. Materials and equipment assistance

During the last year there has been a substantial improvement in the supply of basic materials and production equipment to meet the needs of small business. Since November 1957, even supplies of nickel anodes for electroplating have apparently been sufficient to meet the full production requirements of small firms. At present there is an excess of the supply of materials and equipment, but if the Department of Defense requirements should increase, even moderately, small firms will again experience shortages in varying degrees. Historically, such shortages have adversely affected the competitive position of small business, and this agency has found it necessary to take vigorous action to help the small-business community.

Small firms have frequently complained about the high cost of production equipment. As a result, the agency has been asked frequently to locate commercial sources of used equipment or surplus Government-owned equipment.

The Office of Civil and Defense Mobilization regularly asks the SBA to review each request of the Department of Defense for approval to lease Government-owned machine tools for nondefense purposes. The purpose of the agency's review is to see that such leases do not adversely affect the competitive position of small business.

At the request of the Office of Civil and Defense Mobilization the agency actively participated on the interagency Task Group on Uniform Leasing Practices, which developed uniform leasing rates and established standards for the various contract provisions applicable to such leases under Defense Mobilization Order VII–4.

An indication of the diversification of SBA activities with respect to materials and equipment assistance is the number and type of meetings and conferences in which the agency has participated. The agency has taken part with representatives of other agencies to discuss tools and dies, aluminum, venetian blinds, steel products, machine tools, nickel, copper, gypsum, cement, glass, paper, industrial diamonds, selenium, titanium, electronic equipment, construction machinery, argon gas, disposal of surplus aircraft and ships, and other products and materials.

The SBA acts as spokesman for small business before, and consults with, other Government agencies which are considering the adoption or revision of materials and equipment policies, programs, or regulations affecting small business.

Through its field offices, the agency provides small firms with information on the Government's materials and equipment regulations.

The SBA implemented its assignment under Defense Mobilization Order 1–24 by developing, in cooperation with the Department of Commerce, a procedure for referring to that Department cases where small firms experienced hardships in seeking materials and equipment. The Department agreed (1) to recommend to the SBA alternate sources of supply for those firms which were dealing entirely with civilian work, and (2) to issue priorities or directives to those small firms engaged in defense production to insure completion of their defense orders on time. The procedure enables the SBA to make recommendations in the interest of the small-business community.

E. Tax-amortization program

The accelerated tax-amortization program was established by the Government as an incentive, in the form of tax relief, for concerns to expand defense production facilities, and the SBA continues to perform two principal functions in this rapidly declining program.

At the request of the Office of Civil and Defense Mobilization and the delegate agencies, the SBA field offices obtain additional information about small-business applications for tax-amortization certificates which lack essential data. In other cases, the agency is asked by small firms to check on the status of their applications and advise them of adverse developments or other circumstances. Both functions became relatively inactive during the latter part of 1957, as a result of the restrictions imposed by Public Law 85–165.

A procedure developed with the Department of Commerce assures full consideration of small-business applications referred by the Office of Civil and Defense Mobilization to the Department of Commerce for review. Before recommending disapproval of any small-business application, the Department asks the SBA for comment or additional documentation in support of the application.

During the fiscal year ending June 30, 1958, all expansion goals were closed, and no applications for tax-amortization certificates were approved by the Office of Civil and Defense Mobilization during most of that period. At present applications are granted on an individual basis according to the merits of each case.

From a practical standpoint, it appears unlikely that small firms will be able to qualify for certificates under Public Law 85–165 because it states that to qualify, a facility must be used to produce new or specialized defense items or components of new or specialized defense items during the emergency period.

F. Small-business production pools for defense

The SBA is authorized to advise and assist in the formation of small-business production pools and to formally approve the pools' proposed operations, subject to the concurrence of the Attorney General and the Chairman of the Federal Trade Commission.

The principle behind production pools is the belief that many small businesses will be assisted in obtaining contracts and orders for the production of items and services which would not otherwise be obtained and which in all probability they would not seek. Whereas experience indicates that pools are less likely to be successful during a period of reduced mobilization than in wartime, interest in production pools has shown a decided increase, especially during the last 6 months. It appears that firms which have suffered a decline in orders or production of civilian-type business have considered forming pools as a means for improving their competitive position for Government purchases of defense items.

At present there are 5 approved pools, only 1 of which considers itself active and is seeking defense prime and subcontracts. The other four pools are maintaining their organizations on a standby basis.

During the reporting period, a new member was added to the Allied Specialties Co., and an application is pending from a proposed pool located on Long Island, N. Y. In addition, groups in Hawaii, Puerto Rico, Oregon, California, Florida, and Arizona have obtained information with respect to the formation of small-business production pools for defense.

Following are the names and addresses of the presently approved production pools, with number of companies and employees comprising each:

Name and address	Number of companies	Number of employees
Allied Construction Contractors, Joliet, Ill.	5	107
Allied Specialties Co., Philadelphia, Pa.	15	416
Caledonia County Production Pool Associates, St. Johnsbury, Vt.	3	30
General Tire Production Pool, Inc., Akron, Ohio	3	111
Huntington Production Pool, Huntington, W. Va.	12	926
Total	38	1,590

Through the second quarter of 1958, Allied Specialties Co. has successfully obtained and performed 302 defense prime contracts, totaling $1,182,932, and 2 subcontracts valued at $65,967. During past years, General Tire Production Pool, Inc., was awarded 2 prime contracts, totaling $95,000, and 2 subcontracts totaling $20,000.

G. Production assistance

SBA, through its production specialists in the agency's field offices, makes a continuous effort to help small firms in production matters, simultaneously avoiding direct competition with engineers and consultants who make their services commercially available. Specific problems frequently arise in instances where a small company is making items for the Government indirectly related to its normal civilian business. Advice can also be given on problems of plant location and plant layout. In some instances, the agency may recommend several professional consultants who specialize in management and production problems.

Examples of assistance given by the agency's field offices are indicated in exhibit H.

H. Management counseling

A large proportion of small-business operators who have particular problems, want assistance on a personal basis, and on short notice. At the same time, many do not know where to turn for the help they need. These two problems are intensified by the fact that, broadly speaking, the cost of expensive outside counsel is prohibitive for many of these small firms. The question, therefore, is how can practical, individual help be provided where it is needed and wanted at modest or no cost.

The management counseling program, carried on by SBA through both its Washington and field offices is designed to provide one answer to this question. The service is given free to businessmen who request it. Hundreds of cases are received and serviced each month. They come to SBA daily by telephone, letter, and personal visit.

Personal visits are becoming increasingly popular, since many businessmen prefer to "talk out" a problem rather than write a letter about it. As a result, the owners of small businesses have become better acquainted with the experience of the technical members of our staff. In many cases, some research is done to bring together the necessary information or to find out how the businessman should proceed to obtain the data he wants.

Most of this individual counseling is made available through the trained management specialists in the SBA field offices throughout the United States. Within the limits of time and manpower, these men give as much help as possible to all inquirers. Every effort is made to handle cases effectively and rapidly. To do so, the field personnel call upon their own training and experience, their local contacts with other governmental and private organizations, their knowledge of published material, library references, and the staff of the Office of Procurement and Technical Assistance in SBA's Washington office.

In order to be certain that the latest information is constantly available, reference libraries have been established in the Washington office and in each of the 15 regional offices. These libraries, which are open to all businessmen, students of small business, and practitioners alike, contain references, textbooks, rosters, booklets which have been publicly and privately printed, business magazines, and business papers. With this constant flow of current information into these offices, quick and satisfactory answers are more promptly available to all who inquire for assistance.

The rosters referred to above contain membership rolls of many technical and professional organizations. Many of these professional people are qualified to help the owners of smaller firms.

The following paragraphs give some indication as to the reception accorded to this counseling service:

Mr. H. W. S., of Bloomfield, N. J., writes: "I wish to take this opportunity of expressing my personal thanks for your letter. Your assistance in steering us in the right direction has given us the confidence we needed."

Mr. D. E. H., of Spartenburg, S. C., writes: "Thank you very much for your letter and the enclosures it brought along for me which will be of assistance in my presentation on 'competition' to be given before the group in Charlotte, N. C."

I. Management publications

Every owner of a small business is daily faced with decisions which have to be made right if the concern is to continue to operate. Experience and training provide answers to only some of these problems. On others many managers need additional facts.

Since the bulk of small-business management problems have been successfully solved by some, one task of the SBA is to identify key problems and disseminate to those who need it information leading to solutions. The agency's management publications are prepared with this purpose in mind.

Care is taken to select subjects of current interest to small-business owners. Authors are selected from among business managers, professional men, trade association executives, Government specialists, and others who are acknowledged authorities on the subjects covered. The resulting publications are then placed in the field offices of the SBA, where they are available upon request.

The following remarks, typical of many others, reflect the views of readers and users of the agency's small business management publications:

A small producer in Utah writes: "We have been receiving SBA's Management Aids for the past year. They are the best source of helpful information we have been able to find. As you no doubt know, there are numerous sources of information available to the large manufacturer * * *. But the small manufacturer who must double up in the use of his personnel * * * cannot find the kind of counsel he needs in the material that is being written for the larger producers. Your publications, on the other hand, are written with the small manufacturer's problem in mind. In several cases we have adopted entire leaflets issued by your agency as our standard procedure * * *."

A trade association in Oklahoma writes: "We have started distribution of your material to our members and plan to mail them one of your pamphlets every week. We are sure that each member will find something to benefit his business among the variety of titles * * *."

An Illinois trade association writes: "Your office is to be congratulated on Ratio Analysis for Small Business, the latest in the Small Business Management series. May we have permission to reprint Chapter 5, 'Ratio Analysis in Action * * *?' We would like to * * * urge the members to read the entire booklet."

Six series of publications are currently being issued by the SBA. More than 200 separate titles have been released with virtually no criticism. The six series are: Management Aids for Small Manufacturers; Small Marketers Aids; Technical Aids for Small Manufacturers; Aids Annuals series; the Small Business Management series; and Small Business Bulletins.

Management aids for small manufacturers.—Some 94 titles of these four-page free leaflets have been produced. New subjects include: Job Evaluation in Small Industry, Improving Foremen Relations in Small Plants, and Traps To Avoid in Small Business Management. Total demand to date for these Management Aids stands at more than 2,576,105 copies.

Small Marketers Aids.—Since, under its enabling legislation, the SBA is concerned with the welfare of small distributors, as well as manufacturers, the series of leaflets called Small Marketers Aids is being published. Some 30 titles have been issued thus far. New subjects include: Basic Accounting for Small Partnerships, Profitable Buying for Small Retailers, and Are You Kidding Yourself About Profits? Distribution thus far amounts to approximately 1,040,700 copies.

Technical Aids for small manufacturers.—Technological changes affect many production aspects of even the smallest manufacturing plant or shop. These changes involve production processes, machinery and equipment, materials, and maintenance. Technical Aids leaflets are issued to supply new or needed information on manufacturing problems created in this manner. Some 59 Technical Aids have been published. Recent releases include: Rust Preventive Coatings—Petroleum Base, Should Your Plant Lease Production Equipment? and Uses of Ceramic-Coated Metals in Small Plants. Requested distribution to date stands at more than 870,985 copies.

Aids annual series.—These volumes make back numbers of the Aids available in permanent, bound form. Each winter the annual production of Aids released 2 years before is revised and reissued as a book. Copies are sold through the Superintendent of Documents. To date, 5 volumes have appeared at prices ranging from 45 cents to $1. Aggregate sales to date total approximately 65,465 copies.

Small-business management series.—When a needed management subject cannot be covered adequately in an Aid leaflet, a contract is made with a leading authority to prepare a manuscript. When completed, it is printed by the Government Printing Office and sold at a nominal price. Considerable research goes into the preparation of such manuscripts.

Widespread acceptance of these booklets and the subjects covered is indicated by total sales of 21 titles which have now reached more than 556,345 copies.

The most recent volume is Profitable Small Plant Layout. As No. 21 in the series, it was released in June 1958.

Small-business bulletins.—This series represents a new field into which the Agency has found it necessary to move. On March 4, 1958, the former Business Service Bulletins program was transferred from the Department of Commerce to the Small Business Administration. Plans have been developed to carry on this work in SBA through a new series known as Small Business Bulletins. These are 2- to 12-page leaflets designed to provide reference sources for small-business owners and managers. The first issue is currently available under the title, "Handicrafts and Home Products for Profit." In the period covered by this report, 2,935 copies have been distributed free on request.

The titles of Management Aids, Technical Aids, Small Marketers Aids, Small Business Management series, and Small Business Bulletins issued to date are shown in exhibit 1. Also included is a ranking of the Small Business Management series by sales, and a chart showing distribution and sale of SBA publications.

J. Management education

Education is basic to the progress of this country thus far, as well as to future progress. Management training presented by experienced educators in established educational institutions is bringing the owners and managers of small firms up to date on current policies and practices, and opening their thinking to new and improved ideas. Year after year, statistics compiled by Dun & Bradstreet, Inc., show that 9 times out of 10, business failures are due to poor management.

The small business management development program of the SBA is an educational program cosponsored by the SBA and local educational institutions to assist owners and managements of small businesses to strengthen their positions as managers. It is a program designed for owners and managers, rather than employees of small firms, and it is concerned with administrative management, rather than day-to-day operational subjects. Since two experimental courses were offered on a pilot basis in the spring of 1954, the program has been proven sound and is being extended rapidly by administrators and educators of American schools of business, university extension divisions, evening colleges, and distributive educators. In the school year 1955–56 it was expected that 20 courses would be cosponsored. Instead, the number reached 53. And so the program has grown.

Through June 30, 1958, 419 courses have been conducted by 155 educational institutions. More than 13,100 businessmen have successfully met requirements for certificates of completion awarded by the educational institutions. Of this total of 419 courses, 155 courses were held during fiscal year 1958, conducted by 97 institutions. These 155 courses were attended by approximately 5,400 businessmen.

The businessmen-students pay tuition which covers the cost of the course. The educational institution assumes full educational and financial responsibility for all the courses, and the Small Business Administration aids as cosponsor—often with several local organizations, such as the Clearinghouse Association, chamber of commerce, or junior chamber of commerce, local and State manufacturers', retailers', or wholesalers' associations, and individual trade groups. Typically, a course is offered in the evening, one night a week for 8 to 10 weeks, totaling 16 to 30 hours. Preferably, classes are small averaging from 15 to 30 enrollees per class.

Names and locations of educational institutions which have conducted courses are shown in exhibit J.

That the businessmen, themselves, like the program is indicated by the analysis which was made of the unsigned evaluations submitted to educational institutions by those who have completed the courses; 86 out of every 100 businessmen taking the courses rate them excellent to good; another 14 rate them satisfactory; only one-half of 1 percent consider them poor.

In response to the question, "How relevant to your interests were the problems discussed?" only 5 out of 100 stated that the problems were mostly irrelevant. The other 95 rated the problems discussed from "vital to our operations" to "important."

Eight out of ten of the speakers fulfilled their assignments well, according to the businessmen-students. Out of 100 students, 98 believe the course should be offered again and would recommend it to friends and associates.

Following are typical comments received in reference to the courses:

"To me the course was very beneficial on every subject covered. It reassured me of the correct procedures we were taking in our business and, also, pointed out some incorrect things we were overlooking, which we intend to correct. The course was well worth the time."

"The financing knowledge picked up helped me secure financing that I couldn't have gotten otherwise. This is worth more to me than the cost of the entire course."

"It has been a real privilege for me to participate in the Small Business Management Institute. * * * The * * * faculty should be commended for a very practical approach in preparing the program. Personally, I have been able to apply much of what I have received in my own business. I would recommend the program highly to owners, managers, and people in supervisory positions in all types of business."

V. SBA LIAISON OFFICERS WITH THE DEPARTMENT OF DEFENSE AND FEDERAL CIVILIAN AGENCIES

A. Department of Defense

A representative is assigned to the Department of Defense to help achieve greater coordination of the two agencies' small-business programs. The SBA representative participates in conferences and in the preparation of directives relating to small-business policies of the Defense Department and the three military services. Defense officials have given this liaison officer execellent cooperation, and his participation at the Defense Department's policy level has resulted in a number of changes beneficial to small business. This SBA representative participates with the policy level officials of the Department of Defense by reviewing proposed policies, instructions, procedures, and implementations that affect small business, and makes recommendations with respect to such proposals.

B. Civilian agencies

A liaison coordinator is assigned also to civilian departments and agencies having small-business procurement authorities and programs. This representative participates in conferences and consults with key officials of civilian Government agencies with respect to small-business participation in proposed procurements of these agen cies. Civilian agencies have given this SBA representative excellent cooperation.

C. Office of Civil and Defense Mobilization

The SBA has been cooperating on a continuous basis with the Office of Civil and Defense Mobilization in the development and operation of a damage-assessment program. The method in development allows a reasonable determination of enemy capability for destruction, comparison of methods for reducing casualties and property damage, and estimating damage rapidly after an actual attack.

While the SBA representative is primarily concerned with small business as an important part of the mobilization base, he also supplies technical assistance to regular OCDM personnel. SBA field offices supply data with regard to specific small-business firms from the facilities inventory on a regular basis. Geographic location, in accordance with an Army grid system, is determined by each of the SBA field offices.

The SBA is serving on a Defense and Civilian Mobilization Board committee studying a proposed community industrial mobilization plan under which alternate production sources would be established throughout the United States in smaller communities. The SBA is also represented on other OCDM committees including those concerned with planning and programing for Operation Alert. The SBA always has a representative on a continuous basis at the OCDM relocation site during Operation Alert, both for routine operations and gaming, and for briefing Government officials as to the status of small business.

VI. FINANCIAL ASSISTANCE TO SMALL BUSINESS

Section 207 (a) of the Small Business Act of 1953, as amended, authorizes the SBA "to make loans to enable small-business concerns to finance plant construction, conversion, or expansion, including the acquisition of land; or to finance the acquisition of equipment, facilities, machinery, supplies, or materials; or to supply such concerns with working capital to be used in the manufacture of articles, equipment, supplies, or materials for war, defense, or essential civilian production; or as may be necessary to insure a well-balanced national economy; * * *"

In carrying out its functions, SBA financial specialists have given advice and counsel to thousands of small-business concerns on their financial management problems, actively representing them in many cases in their negotiations with private financial institutions, and, when needed financing was not otherwise available, the agency has provided these businesses funds for expansion and operations.

In this manner the SBA is contributing to the independence and economic health of American small business, adding its part to the program of industrial mobilization to preserve our national security. Many of the loans made by the SBA, under the authority of the Small Business Act of 1953, as amended, are to finance the performance of war and defense contracts and thereby effectuate the purposes of the Defense Production Act of 1950, as amended.

For the fiscal year ended June 30, 1958, the SBA received 7,898 applications for regular business loans for a total approximately $448,111,000, of which 578 applications for a total of $37,378,000 were subsequently withdrawn. A total of 4,014 loans aggregating $194,997,000 was approved, 2,721 applications totaling $171,477,000 having been declined, with the balance pending final action.

These figures represent a 12- to 18-percent increase in the dollar value and number of applications received and approved over the similar figures for fiscal year 1957.

The SBA continued to cooperate with the Fish and Wildlife Service, United States Department of the Interior, by assisting in devising new procedures for processing applications and disbursing approved loans. Assistance is also rendered in servicing loans approved by the Secretary of the Interior where funds have been made available by the fisheries loan fund established by section 4 of the Fish and Wildlife Act of 1956 (70 Stat. 1119, 1121).

During the last half of fiscal year 1958, the agency adopted new procedures to speed up the processing and closing of loans. Additional redelegations of authority to expedite the processing and approving of loan applications have been given to staff members in the field offices. The Small Business Act which previously provided for drought-disaster loans was, during the last half of fiscal year 1958, further amended to provide for the granting of disaster business loans in areas similarly declared excessive rainfall areas.

A noteworthy feature of SBA's lending program is that, despite the business recession experienced during fiscal year 1958, banks participated with SBA in nearly two-thirds of the loans approved. Approximately one-fourth of the participation loans were on a deferred basis and the remainder on an immediate basis.

Total loans approved

[Dollars in thousands]

	Fiscal year 1958—July 1957–June 30, 1958			Cumulative through June 30, 1958		
	Number	Amount approved		Number	Amount approved	
		Total	SBA share		Total	SBA share
Business loans:						
Direct	1,509	$67,735	$67,735	3,664	$158,753	$158,753
Immediate participation	1,887	101,586	79,264	4,668	240,138	187,746
Deferred participation	618	25,674	18,982	2,778	120,890	89,457
Total participation	2,505	127,261	98,246	7,446	361,029	277,204
Total business	4,014	194,997	165,982	11,110	519,782	435,958

Of the 11,110 business loans approved from inception through June 30, 1958, 4,002 aggregating $255,439,000 were for manufacturing firms. The remaining 7,108 loans, totaling $264,344,000, were for various nonmanufacturing business activities.

There was again substantial activity in loans approved to disaster victims under section 207 (b) of the Small Business Act of 1953, as amended, for fiscal year 1958. During the period, 2,021 disaster applications were received totaling approximately $32,409,000—94, totaling $2,139,000, subsequently were withdrawn; 1,559 were approved for $17,305,000; and 350 were declined for $7,826,000, with the balance pending action.

Total loans approved

[000 omitted]

Type of loan	Fiscal year 1958 (July 1957–June 30, 1958) amount approved			Cumulative through June 30, 1958, amount approved		
	Number	Total	SBA share	Number	Total	SBA share [1]
Disaster loans:						
Direct	1,453	$13,753	$13,753	6,754	$65,809	$65,809
Immediate participation	53	2,945	2,516	203	10,995	8,616
Deferred participation	53	606	501	751	6,509	5,553
Total participation	106	3,552	3,018	954	17,504	14,169
Total disaster	1,559	17,305	16,771	7,708	83,314	79,979

[1] In addition, SBA processed and performed the closing and disbursing function for 7 sec. 302 Defense Production Act loans approved by the Treasury Department in the amount of $4,306,000 (cumulative).

VII. SMALL BUSINESS SIZE STANDARDS

Congress, in the Small Business Act, has stated that to be considered small and therefore eligible for assistance from the Small Business Administration, a business concern must be "* * * independently owned and operated and * * * not dominant in its field of operation. * * *" The act also authorized the Small Business Administration, in making a more detailed definition of small business, to use number of employees and dollar volume of business among other criteria. The Agency uses two different yardsticks in determining whether a firm is small—one is employed in determining whether a firm is eligible for assistance in selling to the Government and the other in determining whether it qualifies for financial and other nonprocurement assistance.

The new small business size standards became effective January 1, 1957. The definition for procurement assistance was formulated by an interagency task force for procurement purposes and represents the unanimous judgment of the 14 Government agencies chiefly concerned with procurement procedures and the Small Business Administration. Subsequent amendments affecting the size standards of the petroleum refining industry and the construction industry became effective April 11 and May 1, 1958, respectively.

Under the new ruling, for the purposes of Government procurement, a concern is a small business if (*a*) it is not dominant in its field of operation and, with its affiliates, employs fewer than 500 employees, or (*b*) it is certified as a small business concern by the Small Business Administration.

In the petroleum refining industry, for the purpose of Government procurement, a concern is classified as small business that (1) is independently owned and operated, (2) is not dominant in its field of operation, (3) together with its affiliates employs not more than 1,000 persons, and (4) does not have more than 30,000 barrels per day capacity from owned and leased facilities. The crude oil capacity of a refinery approximates the maximum daily average crude runs to stills that can be maintained for an extended period.

In the construction industry a small business concern is a concern which, including its affiliates, has average annual receipts of $5 million or less for the preceding 3 years. This criterion is used as a requirement to be classified as a small concern in place of number of employees.

To be classified as a small business concern, a nonmanufacturing firm or a manufacturing concern which proposes to furnish a product made by another firm bidding on Government purchases must meet the same criteria as a manufacturer, plus two additional requirements: (1) It must be defined as a regular dealer under the Walsh-Healey Public Contracts Act; and (2) in the case of a Government purchase reserved for award to small business, or in appropriate cases involving equal bids, it must furnish the product of a small manufacturer or producer in the performance of the contract.

When submitting a bid or proposal on a Government procurement, a concern which meets the above criteria, and which has not previously been denied small business status by the SBA, may represent in the appropriate place on the bidding form that it is a small firm. The concern will then be deemed to be a

small firm for the purpose of the specific Government purchase, unless another bidder protests to the contracting officer and the Small Business Administration about the firm's size status, or the contracting officer, himself, questions its representation. If the firm's representation that it is a small business is challenged, it may then apply to the nearest SBA field office for a certificate that it qualifies as a small firm. If granted, this small business certificate is conclusive.

If a firm is in doubt as to whether it meets the small-business criteria, it may apply to the nearest SBA field office for a decision.

This definition differs from the old less-than-500-employees standard in the following respects:

1. The factor of dominance in an industry is added. Under the new definition, firms having more than 500 employees in some industries may be determined to be small business if they are nondominant in the industry. Conversely, a firm and its affiliates having fewer than 500 employees may be considered large if they are dominant in the field.

2. In the construction industry, the criterion for classifying a business concern by size for Government procurement is average annual receipts for the preceding 3 years rather than number of employees.

3. In the petroleum-refining industry the employment size standard has been increased to 1,000 and the factor of capacity of the concern has been added as a second index of size.

4. A nonmanufacturing firm must, itself, be classed as a small-business concern, and also must furnish the product of a small-business manufacturer or producer in the performance of the Government contract reserved for small business.

5. The number of employees formerly was the total number of the firm and its affiliates at the time of submission of the bid. Under the new definition, number of employees means the average employment of any concern and its affiliates based on the number of persons employed during the pay period ending nearest the 15th of the 3d month in each calendar quarter for the preceding 4 quarters. If a concern has not been in existence for 4 full calendar quarters, number of employees means the average employment of such concern and its affiliates during the period such concern has been in existence, based on the number of persons employed during the pay period ending nearest the 15th of each month.

The Small Business Administration has received from business concerns with an average of more than 500 employees, including affiliates, several hundred applications for small-business certificates for the purpose of Government procurement.

In order to protect the interests and the competitive position of the many smaller businesses which compete with the larger businesses which request small-business certification, it has been necessary to deny many requests. However, approximately 100 small-business certificates have been issued. Each certificate has been limited to specified fields of operation characterized by a few large business enterprises and not very many smaller businesses with average employment under 500 persons.

Insofar as the definition for business loans and purposes other than Government procurement are concerned, the SBA will continue to use the definition of small business adopted by it on June 10, 1954. This definition provides:

Manufacturing concerns.—Any manufacturing concern is classified as small if it has 250 or fewer employees, including employees of affiliates; as large if it employs more than 1,000 persons. A manufacturing firm which has more than 250 but not more than 1,000 employees may be classified as either small or large, depending upon the size standard which the SBA has developed for its particular industry.

Nonmanufacturing concerns.—Any wholesale concern is considered small if its annual dollar volume of sales is $5 million or less; in general, any retail or service trades concern is small if its annual sales or receipts are $1 million or less (the regulation also provides certain exceptions). Any construction concern is small if its average annual receipts are $5 million or less for the preceding 3 years; any trucking and warehousing concern is small if its annual receipts are $2 million or less; any taxicab concern if its annual receipts are $1 million or less If a size standard has not been established for a particular kind of business, a size determination will be made on the basis of available economic data.

INDEX OF EXHIBITS

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EXHIBIT A.—*Procurement and technical assistance accomplishments*

	Aug. 1, 1953–June 30, 1958	Fiscal year 1958	Fiscal year 1957
Procurement set aside for small business	41, 290	17, 819	11, 851
Value	$2, 919, 582, 709	$1, 062, 454, 031	$744, 335, 300
Prime contract referrals	427, 033	32, 185	53, 857
Calls to develop subcontract opportunities	16, 312	3, 021	4, 741
Subcontract opportunities referred	36, 298	6, 474	6, 384
Cases of procurement assistance counseling and representation to procurement agencies in behalf of small firms	[1] 112, 049	24, 848	30, 389
Firms helped to bid on specific procurements	29, 342	7, 701	10, 029
Contracts to develop additional sources of supply for bidders lists on which small business competition was needed	[1] 32, 228	11, 446	8, 885
Certificates of competency:			
Applications received	916	239	238
Value	$185, 602, 300	$62, 562, 700	$39, 908, 400
Number of COC's issued	432	115	104
Value	$64, 081, 200	$26, 077, 582	$10, 590, 100
Plant visits in connection with progress of certified contracts	4, 189	699	792
Engineering surveys (loans, certificates, preaward, etc.)	11, 752	4, 879	3, 340
Cases in which production and management assistance, including materials and equipment assistance, was given	32, 084	3, 596	4, 413
Requests for products assistance handled	25, 353	6, 540	10, 455
Inventions listed in products list circular	[2] 3, 424	1, 341	1, 220
Requests received for information and data on inventions listed in the circular	[3] 8, 568	2, 946	3, 731
Administrative management courses:			
Courses conducted	[4] 419	155	109
Participating educational institutions	[4] 155	97	69
Businessmen-students	[3] 13, 165	5, 400	4, 265
Publications distributed:			
Management Aids	4, 576, 105	498, 865	366, 395
Technical Aids	870, 985	162, 785	175, 140
Small Marketers Aids	1, 040, 700	500, 295	279, 740
Small Business Management Series Sales	556, 345	81, 936	86, 053
Management and Technical Aids Annuals, Sales	65, 465	17, 650	23, 666

[1] Covers period beginning July 1, 1954.
[2] Covers period beginning Mar. 1, 1955.
[3] Covers period beginning Dec. 1, 1955.
[4] Covers period beginning October 1954, except for 2 pilot courses held in spring of 1954.

EXHIBIT B.—*Joint set-asides, comparison of fiscal years 1957 and 1958*

	Fiscal year 1957	Fiscal year 1958
Initiated by SBA	12, 082	19, 273
Value	$830, 653, 075	$1, 390, 350, 806
Agreed to	11, 851	17, 819
Value	$744, 335, 298	$1, 062, 454, 031

EXHIBIT C.—*Report of Small Business Administration joint set-aside program, cumulative from Aug. 1, 1953, through June 30, 1958*

	Procurements screened		Set-asides initiated		Set-asides agreed to	
	Number	Amount	Number	Amount	Number	Amount
Army	34, 456	$5, 549, 617, 052	16, 953	$1, 601, 351, 063	15, 809	$1, 276, 069, 939
Navy	53, 131	13, 355, 648, 528	15, 362	1, 168, 222, 587	14, 651	1, 053, 908, 120
Air Force	36, 617	23, 636, 164, 789	6, 262	697, 912, 250	5, 832	483, 380, 046
Civilian agencies	12, 368	411, 229, 023	5, 156	120, 369, 265	4, 998	106, 224, 604
Total	136, 572	42, 952, 659, 392	43, 733	3, 587, 855, 165	41, 290	2, 919, 582, 709

EXHIBIT D.—*Certificates of competency, origin, and disposition of applications (Aug. 1, 1953, through June 30, 1958)*

Agency	Applications received	Certificates issued
Total	916	432
Army	377	185
Chemical Corps	7	3
Corps of Engineers	20	7
Ordnance Corps	73	32
Quartermaster Corps	121	38
Transportation Corps	15	12
Signal Corps	138	91
Headquarters, Fifth Army	1	1
U. S. Military Academy	1	
Rocket and Guided Missile Agency	1	1
Navy	157	68
Naval Supply Depot	1	
Bureau of Aeronautics	1	
Aviation Supply Office	11	5
Electronics Supply Office	8	6
General Stores Supply Office	44	24
Navy Purchasing Office	36	15
Bureau of Ordnance	9	1
Bureau of Ships	37	12
Ships Parts Control Center	5	4
Marine Corps	1	
Naval Shipyards	1	
Naval Gun Factory	1	
Navy Air Material Center	1	1
Naval Supply Center	1	
Air Force	320	152
Joint Agencies	41	16
Military Medical Supply Agency	13	7
Military Clothing and Textile Supply Agency	26	9
Military Petroleum Supply Agency	2	
General Services Administration	18	10
Treasury, Bureau of Engraving and Printing	1	1
Interior, U. S. Geological Survey	1	
U. S. Post Office Department	1	

EXHIBIT E. EXAMPLES OF SPECIFICATIONS ASSISTANCE

The Small Business Administration was informed that a small business manufacturer had been unable to obtain Government contracts because the departmental specification in use described a proprietary product. The SBA obtained copies of the IFB's, specifications, bid prices, and related data, and determined that the complainant was an established small manufacturer whose bid on Government purchases was often low but whose commercial product did not meet the requirements of the departmental specification being used. The specification being used was found to describe the product of a competitor.

The SBA communicated with the contracting officers in an endeavor to get them to broaden the specification, which they refused to do. SBA then appealed to the Department of Defense to prepare a military specification on the product. The DOD accepted SBA's recommendation and assigned the preparation of a specification to the activity which had made most of the procurements. However, that activity insisted on retaining the proprietary requirements of the departmental specification currently in use.

The SBA took a very active part at meetings with representatives of the activity assigned the preparation of the specification, the DOD, and the principal manufacturers of the product, in seeking the promulgation of a specification that

would permit interested small firms to qualify for Government purchases of the product. Such a specification was finally issued. Without the constant efforts of the SBA, the specification would not have been prepared.

A small manufacturer appealed to SBA for assistance in seeking revision of a Federal specification to permit the qualification of their product. SBA determined that the firm's product was on the list of approved manufacturers certified by a Government regulatory agency to produce products meeting certain safety requirements. SBA then asked the agency which wrote the original specification to broaden the specification to permit the firm's product to qualify. This was done, resulting in another small company being able to bid on procurements heretofore available only to large companies.

It was found that small firms could not compete with large corporations for the sale of plastic assault boats since the specification provided for a molded hull requiring the use of expensive dies and equipment. SBA was successful in having the specification changed to allow the use of a more modern method of production. The new procedure is economical and less costly to the Government. As a result of this, a small firm received a contract for over $1 million.

EXHIBIT F. EXAMPLES OF PROCUREMENT ASSISTANCE

The SBA representative at a large purchasing office worked with procurement officials in trying to reduce the number of sole-source procurements. While screening such a procurement, he noted that although there was only one known source [large business] and no military specifications or drawings, the item could be made by small business. Further investigation disclosed that it was not proprietary, and that the sole-source firm's drawings were on file at the installation. Since the Government had the rights to these drawings, he requested a 100 percent set-aside for small business, which was granted. To insure adequate small-business participation, the SBA and the procurement officials, acting separately, then furnished drawings of the item to over 200 small-business firms to learn if they were interested in bidding. This action resulted in 23 bids by small firms and an award to a small firm at a unit price of only about one-fourth that previously charged by the sole-source producer.

The Administrator received the following letter from a Los Angeles firm: "With the help of the Small Business Administration, we have just successfully completed a $95,700 contract with the United States Navy. Without this help, it would have been impossible to secure this contract. However, due to your help, we have now broken through the initial barrier and are launched on what promises to be a permanent and profitable business. * * *"

A small manufacturer requested help from the SBA field office in getting an office accessory in the GSA catalog and on the qualified products list. The office's procurement center representative contacted the proper officials and made provisions for sample acceptance by GSA. After a lapse of time, followup was made to get the samples scheduled. This product is now on the Government schedule of qualified products, is available as a scheduled item, and the small manufacturer is pleased with the assistance given him.

The following letter was received from a small firm in Mississippi:

"We have received a formal invitation from the Chicago Procurement Office for the 39 tractors, 19 of which are on a formal bid and 20 on a set-aside.

"We take this opportunity to express to you the very sincere appreciation of our company, as one of the small businesses that will now have an opportunity to bid on this procurement, for the splendid work of the Small Business Administration, and your office in particular, in securing a 50 percent set-aside.

"As a small-business concern it was certainly heart warming to me to see the agressive moves made by your office and your Chicago office, to assure that small business had an opportunity to participate in this procurement. * * *"

A small firm which had successfully performed Air Force contracts for cannibalizing B–36 bombers, expanded its facilities so as to handle an increased amount of such work, which it understood would be forthcoming. In the meantime, however, Air Force officials decided that the Air Force would cannibalize

the bombers rather than contracting for the work. When the firm brought its complaint to the SBA, it in turn notified SBA in Washington, who requested a review of the proposed action by Air Force Headquarters. As the result, the decision was made that cannibalizing the B–36 bombers should be performed by private contractors.

The following letter was received from a firm in Massachusetts which had received assistance from the agency: "We have just been officially notified that we were awarded * * * contract. * * * This means full employment and a steady and busy run all spring. We are deeply grateful for the very fine cooperation you and your associates gave us recently in Washington. * * *"

The following letter was received by the agency's San Francisco office:

"Today we received from [procuring activity] four copies of a contract covering the set-aside portion of the subject invitation * * * for our execution and return.

"This marks the successful culmination of a long and involved series of negotiations with the awarding [procuring activity] which could not possibly have been so satisfactorily concluded without the wholehearted assistance and cooperation so efficiently and ably rendered by your organization in this matter. Often in the past years your agency has extended to us its assistance and the energies of its staff in unravelling the many complex problems which have developed in our dealings with various governmental departments and this instance particularly exemplifies the painstaking care and unstinting efforts you so willingly expend on behalf of the welfare and benefit of the small-business organizations in this area."

The staff of one of our field offices learned from past procurement data that requirements and specifications for generator sets needed clarification to enable small firms to submit bids. Bringing this to the attention of proper procurement officials, they were successful in obtaining simplification of specifications. They then used the services of other SBA field offices to learn of all possible competent small-business producers of the various sizes and types of generators who wished to bid on Government contracts. Because of these actions, they have secured joint set-asides on generator procurements which have resulted in awards to 8 small business firms totaling approximately $20 million. Before this action, small firms had little chance of bidding equitably on generator procurements. This illustrates the coordination of three programs of assistance—specifications, developing potential sources, and joint set-asides—in helping small firms sell to the Government.

A small forging operation was completely shut down owing to defense contract cutbacks. When the proprietor requested assistance from the SBA field office in his area, he was referred to a company which was seeking a forging source and is now operating at full capacity.

An SBA field office was requested by a manufacturer of woven fiber hampers to find small-business sources of supply for wood dowels needed in its product. The firm had been unable to find sources of supply to replace one who had discontinued business and was itself about to cease operations because of this. The SBA office, through its own efforts and those of other SBA field offices, was able to supply the names of 16 small companies who wished to bid on the wood dowel requirements.

A one-man tool and die shop received a $10,000 Government prime contract through contacts made at the small business opportunity meeting. The businessman states that he believes opportunity meetings are exactly what the small-shop owner needs in order to learn of bidding opportunities in a minimum of time.

An example of assistance to small business is illustrated by the action of an SBA representative and procurement officials at the Navy General Stores Supply Office. When large requirements for paint arose due to the closing of naval paint factories, the SBA representative and Navy procurement officials studied the paint industry to find the best means of purchasing the large requirements without disrupting the entire industry. Their solution included setting aside for small business paint procurements estimated at over $1,200,000.

Exhibit G. Examples of Products Assistance

A small Oklahoma firm, developing a new product, requested assistance on proper means of pelletizing this product. Several methods were suggested and names of companies specializing in pelletizing presses were furnished to the company.

An Idaho mine operator had been offered a process for producing copper powder by chemical precipitation directly from high-grade ores. We developed for him price and consumption data on copper powder and the various fields of use where he might expect to sell powder produced from his ores. The agency also suggested sales approaches to copper mills, foundries, and alloy product producers, and with other manufacturers who use copper powder in quantity.

A Texas company that was considering going into the business of scouring and shrinkproofing wool requested information on the use of hydrocarbons for this purpose. SBA determined that hydrocarbons were no longer in use in the United States to process wool; but that they are used to a limited degree abroad. The company was furnished with sources for comparative data on the various processes of wool scouring, as well as sources on processes for recovery of wool grease, and on the shrinkproofing of wool.

Exhibit H. Examples of Production Assistance

A small company which had obtained a $100,000 loan from SBA was processing Government prime and subcontracts with the loan proceeds. They encountered considerable difficulty obtaining materials and parts, which slowed down their operation and at one time completely shut it down. SBA assisted the company in obtaining the materials and parts so that it could continue in operation, although serious financial losses resulted from the delay. In order to make up these losses, it became necessary for the contractor to almost double the production rate at which the plant had once operated. SBA provided counsel and guidance and was given full credit by the company for the enormous increase in production.

An operator of a small drayage firm visited an SBA field office to discuss the possibilities of improving operations. After reviewing the company's operations, SBA made suggestions which were put into effect at once. Within 3 months the plant reported that both volume of business and profits were much better, and the possibility of failure was no longer present.

A group of professional men entered a mining venture in a southeastern State and invested some $40,000 in development and pilot production. Since they were mining a strategic type mineral, the agency was able to guide them for certain types of aid to the Defense Mineral Exploration Administration. Suggestions were made as to the manner in which the group could increase production of processing material with accompanying reduction in cost. Recommendations were also made as to transportation means and methods of obtaining additional financing.

A western producer of charcoal had been experimenting with the briquetting of powdered charcoal. His efforts had resulted in complete failure and a visit to the agency resulted in a suggestion that a new special binder be tried. We were informed that pilot runs had been made by the manufacturer with considerable success.

A southwestern manufacturer desired information on methods of waterproofing a plywood storm shelter. He had planned to cover the structure with resin and fiberglass. He needed help when he found that the cost was prohibitive. He was advised by SBA personnel of a construction method using asphalt and commercial calking compound. We were advised that this accomplished the desired results.

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EXHIBIT I.—*Distribution and sale of publications*

Publication	Fiscal year 1958						Cumulative					
	Copies printed	Distributed			Approximate printing cost to SBA	Income from sales by Superintendent of Documents	Copies printed	Distributed			Approximate printing cost to SBA	Income from sales by Superintendent of Documents
		Free	Sold by Superintendent of Documents	Total				Free	Sold by Superintendent of Documents	Total		
Management Aids	542,000	498,865		498,865	$5,050		2,781,300	2,576,105		2,576,105	$33,725	
Technical Aids	192,000	162,785		162,785	1,447		1,041,426	870,985		870,985	14,399	
Small Marketers Aids	516,500	500,295		500,295	4,254		1,162,500	1,040,700		1,040,700	12,237	
Small Business Bulletins	10,000	2,935		2,935	285		10,000	2,935		2,935	285	
Aids Annuals Series	21,500	1,061	17,650	18,711	1,700	$10,232	106,375	3,490	65,465	68,955	13,240	$41,209
Small Business Management Series	133,077	2,832	81,936	84,768	3,332	19,719	722,391	39,421	556,345	595,766	25,278	134,628
Administrative Management Courses Book							3,500	3,125		3,125	375	
Purchasing and Specifications Directory	27,869	2,500	13,533	16,033	3,759	7,174	[1] 99,866	[1] 9,839	[1] 82,618	[1] 92,457	[1] 12,414	[1] 34,254

[1] Includes current edition pus earlier volumes now out of print.

MANAGEMENT PUBLICATIONS

MANAGEMENT AIDS ISSUED

1. How Small Plants Can Sell to the Federal Government.
2. Adequate Production Control.
3. Reducing Accident Costs in Small Industrial Plants.
4. Business Insurance—I.
5. Reducing Accident Costs Through Safe Working Conditions.
6. Is Your Labor Turnover Cost Too High?
7. Reducing Accident Costs by Use of Safety Committees.
8. Incentive Techniques in Small Business.
9. How the Small Plant Can Analyze Old and New Markets.
10. Saving Manpower in Industry.
11. Minimizing the Cost of Breaking in New Personnel.
12. Reducing Accident Costs Through Reports and Records.
13. Small Plant Health and Medical Programs.
14. Subcontracting for Small Plants.
15. Business Insurance—II.
16. Methods Engineering for the Small Plant.
17. How Walsh-Healey Public Contracts Act Affects Government Supply Contractors.
18. Changes in Organization Responsibilities as a Plant Grows.
19. Two Dozen Ideas for Effective Administration.
20. Reducing Accident Costs Through Safe Work Methods.
21. Business Insurance—III.
22. Developing Foremen in Smaller Plants.
23. Budgeting in the Small Plant.
24. Improving Shipping Room Operations in Small Plants.
25. Improving Maintenance Operations in Small Plants.
26. How Management Consultants Help Small Manufacturers.
27. Reducing Accident Costs Through Selling Safety to Supervisors and Workers.
28. Business Insurance—IV.
29. Analyzing Your Government Contract.
30. Employee Selection and Placement Methods for Small Plants.
31. Packaging Pointers for Government Contractors.
32. How Trade Associations Help Small Manufacturers.
33. Borrowing Money From Your Bank.
34. Depreciation, Deterioration, and Obsolescence.
35. Materials Control for Small Plants.
36. Sound Pricing Policy in Bidding on Government Contracts.
37. Figuring and Using Break-Even Points.
38. How Advertising Agencies Serve Small Business.
39. How To Choose Your Banker Wisely.
40. Pitfalls in Estimating Your Manufacturing Costs.
41. How the U. S. Employment Service Helps Small Business.
42. Getting Your Product on a Qualified Products List.
43. Appraise Your Competitive Position To Improve Company Planning.
44. How To Build Your Sales Volume.
45. Judging Your Purchasing Efficiency.
46. How To Analyze Your Own Business.
47. How Federal Mediation and Conciliation Service Helps Small Business.
48. Sales Forecasting for Small Business.
49. Know Your Patenting Procedures.
50. How Manufacturers Agents Help Small Business.
51. How to Reduce Your Operating Costs.
52. Loan Sources in the Federal Government.
53. Small Business Profits from Unpatentable Ideas.
54. Psychological Testing for Small Business.
55. How to Set Up Sales Territories.
56. Streamlining Office Systems in Small Business.
57. Wage Incentives in Small Business.
58. How Independent Laboratories Help Small Business.
59. How Marketing Research Helps Small Manufacturers.
60. How Field Warehousing Concerns Help Small Business.
61. How Good Records Aid Income Tax Reporting.

62. How to Price a New Product.
63. How Food Brokers Help Small Manufacturers.
64. Appeal Procedures for Income Tax Cases.
65. How the Securities Act of 1933 Affects Small Business.
66. How Industrial Distributors Help Small Manufacturers.
67. Developing Sound Production Standards.
68. Using Your Banker's Advisory Services.
69. Redesigning Products for Better Marketability.
70. Record Retention in Small Business.
71. Office Mechanization for Small Business.
72. Broadening Your Manufacturing Operations.
73. Making a Market Survey.
74. Planning Your Working Capital Requirements.
75. Protecting Your Records Against Disaster.
76. Surveying and Controlling Executive Time.
77. Executive Incentives in Small Business.
78. How the Post Office Helps Small Business.
79. Effective Control for Better Management.
80. Choosing the Legal Structure for Your Firm.
81. Utilizing Older Workers in Industry.
82. Reducing the Risks in Product Development.
83. More for Your Storeroom Dollar.
84. Key Factors in Starting a New Plant.
85. Analyzing Your Cost of Marketing.
86. Making Your Sales Meeting Profitable.
87. Traps to Avoid in Small Business Management.
88. Improving Foreman Relations in Small Plants.
89. Job Evaluation in Small Industry.
90. Protecting Your Business Against Dishonesty.
91. How Business Publications Help Small Business.
92. Wishing Won't Get Profitable New Products.
93. Rating Your Firm's Organization.
94. Reserch and Development Opportunities with the Federal Government.

TECHNICAL AIDS ISSUED

1. Proper Alignment of Machine Tools.
2. Sharpening of Drills, Lathe Tools and Milling Cutters.
3. Care and Maintenance of Belt, Chain and Gear Drives.
4. Sharpening Certain Metal Cutting Tools Used in Machine Shops.
5. Precision Measurement of Workpieces.
6. Selecting the Right Tool Steel.
7. Machining Aluminum—I.
8. Metallizing.
9. Machining Plastics—I.
10. Machining Aluminum—II.
11. Machining Plastics—II.
12. Machining, Repairing and Heat Treating Cast Iron Workpieces.
13. Cutting Oils and Coolants.
14. Corrosion in Machine Shops—Causes and Prevention.
15. Machining Brass and Bronze Workpieces.
16. Machining Magnesium Alloy Workpieces.
17. Taps and Dies.
18. Surface Cleaning Techniques.
19. Care and Maintenance of Grinding Wheels.
20. Maintenance of Power Hand Tools.
21. Surface Finishing Techniques—I.
22. Surface Finishing Techniques—II.
23. Titanium.
24. Surface Finishing Techniques—III.
25. Lengthening Tool Life.
26. How To Select the Right Grinding Wheel.
27. Gaging Tolerances in Machine Shops.
28. Economics in Lubrication.
29. Inventions: Government-Owned: Government-Licensed and Registered for License or Sale.

30. Fire Prevention in Small Business.
31. Radioisotopes and Small Business.
32. Essentials of Good Plant Lubrication.
33. Gas Welding of Cast Iron.
34. Handling, Storing, and Dispensing of Lubricants.
35. Care of Hydraulic Systems.
36. Economical Chip Breakers of Machining Steel.
37. Use of Templates and Scale Models.
38. Preventive Maintenance in the Small Plant.
39. Reinforced Plastics.
40. Reducing Costs With Jigs, Fixtures, and Gages.
41. How Good Plant Housekeeping Will Increase Production.
42. Principles of Plant Layout for Small Plants.
43. Plastics—Opportunities for Small Business.
44. Recent Developments in the Ferrous Foundry Industry.
45. Cash Values in Industrial Scrap.
46. Modern Welding Methods.
47. Metal Powder Uses in the Small Plant.
48. The Use of Plastics for Tools, Dies, Jigs, and Fixtures.
49. Control of Expendable Tools—I.
50. Reduce Waste—Increase Profit.
51. Control of Expendable Tools—II.
52. Small Business and the Industrial Applications for Atomic Energy.
53. Increased Profits From Industrial Air Conditioning.
54. Surface Hardening Practices.
55. Increase Production With Ceramic Cutting Tools.
56. Uses of Ceramic Coated Metals in the Small Plant.
57. Should Your Plant Lease Production Equipment?
58. Rust Preventive Coatings—Petroleum Base.
59. Fire Fighting Equipment for Small Plants.

SMALL MARKETERS AIDS ISSUED

1. Records Management in Smaller Stores.
2. Effective Advertising for Small Retailers.
3. Attracting Customers to Your Small Store.
4. Employee Relations for Small Retailers.
5. Basic Stock Control for Small Stores.
6. Building Sound Credit Policies for Small Stores.
7. Why Small Business Owners Need Sound Wills.
8. Providing Management Replacements in Small Business.
9. Competitive Tactics for Small Wholesalers.
10. Diversification for Small Marketers.
11. Sales Training for Small Wholesalers.
12. Turning Customer Complaints Into Profits.
13. Sizing Up Small Business Locations.
14. How Distributive Education Helps Small Business.
15. Appraising the Market for the Services You Offer.
16. Improving Personal Selling in Small Business.
17. How the Department of Justice Helps Small Business.
18. Front Office Courtesy Pays.
19. Fundamental Records for Small Marketers.
20. Buying a Going Concern.
21. Pricing and Profits in Small Stores.
22. Term Loans in Small Business Financing.
23. Individuality in Retail Advertising.
24. Small Business and the Federal Trade Commission.
25. Are You Kidding Yourself About Your Profits?
26. Stock Management in Small Stores.
27. Public Relations for Small-Business Owners.
28. Profitable Buying for Small Retailers.
29. Basic Accounting for Small Partnerships.
30. Are Your Merchandise Lines Paying Their Rent?
31. How Big Companies Help Small Marketers.
32. Methods for Improving Off-Season Sales.

SMALL BUSINESS MANAGEMENT SERIES ISSUED

1. An Employee Suggestion System for the Small Plant.
2. One Hundred and Fifty Questions for a Prospective Manufacturer.
3. Human Relations in Small Industry.
4. Improving Materials Handling in Small Plants.
5. Public Accounting Services for Small Manufacturers.
6. Cutting Office Costs in Small Plants.
7. Better Communications in Small Business.
8. Making Your Sales Figures Talk.
9. Cost Accounting for Small Manufacturers.
10. Design Is Your Business.
11. Sales Training for the Smaller Manufacturer.
12. Executive Development in Small Business.
13. The Small Manufacturer and His Specialized Staff.
14. The Foreman in Small Industry.
15. A Handbook of Small Business Finance.
16. Health Maintenance for Greater Efficiency.
17. New Product Introduction for Small Business Owners.
18. Profitable Advertising for Small Industrial Goods Producers.
19. Technology and Your New Products.
20. Ratio Analysis for Small Business.
21. Profitable Small Plant Layout.

SMALL-BUSINESS BULLETINS ISSUED

1. Handicraft and Home Products for Profit.

Small business management series listed in order of sales

Rank	Title	Date released	Sales to June 30, 1958	Revenue from sales
1	Cutting Office Costs in Small Plants	Feb. 1, 1954	51, 973	$12, 999
2	Cost Accounting for Small Manufacturers	Feb. 23, 1954	48, 023	16, 808
3	A Handbook of Small Business Finance	Oct. 11, 1954	42, 451	12, 735
4	Human Relations in Small Industry	Apr. 25, 1953	39, 606	11, 881
5	Sales Training for the Smaller Manufacturer	Apr. 19, 1954	34, 652	6, 930
6	Public Accounting Services for Small Manufacturers	Sept. 21, 1953	32, 696	4, 904
7	Executive Development in Small Business	May 10, 1954	32, 677	8, 169
8	Ratio Analysis for Small Business	July 1, 1957	31, 037	7, 759
9	Making Your Sales Figures Talk	Feb. 15, 1954	30, 591	6, 118
10	Improving Materials Handling in Small Plants	July 27, 1953	28, 903	5, 780
11	An Employee Suggestion System for the Small Plant	Sept. 10, 1952	27, 557	4, 133
12	Better Communications in Small Business	Feb. 8, 1954	23, 788	4, 757
13	One Hundred and Fifty Questions for a Prospective Manufacturer	Apr. 27, 1953	23, 298	4, 659
14	The Foreman in Small Industry	June 14, 1954	22, 005	4, 401
15	Design Is Your Business	Mar. 29, 1954	19, 407	4, 851
16	New Product Introduction for Small Business Owners	Dec. 19, 1955	19, 002	5, 700
17	The Small Manufacturer and His Specialized Staff	June 1, 1954	18, 908	3, 781
18	Technology and Your New Products	Nov. 13, 1956	11, 924	2, 981
19	Health and Maintenance for Greater Efficiency	Dec. 20, 1954	9, 240	2, 310
20	Profitable Advertising for Small Industrial Goods Producers	Sept. 17, 1956	8, 204	2, 871
21	Profitable Small Plant Layout	June 23, 1958	403	100

Exhibit J. Educational institutions which have cosponsored administrative management courses (by State)

	Number of courses
Arizona: Arizona State College at Tempe, Tempe	8
Arkansas: Harding College, Searcy	1
California:	
College of the Pacific, Stockton	1
Hartnell Junior College, Salinas	1
Sacramento State College, Sacramento	1
Santa Rosa Junior College, Santa Rosa	4
University of California at Los Angeles, Lake Arrowhead, Los Angeles, Riverside, San Diego, Van Nuys, Westwood	43
University of San Francisco, San Francisco	1

Colorado:	
University of Colorado, Boulder	1
University of Denver, Denver	2
Regis College, Denver	2
Connecticut:	
University of Bridgeport, Bridgeport	2
University of Connecticut, Hartford, Waterbury, Norwich	4
Delaware:	
University of Delaware, Wilmington	1
Society for Advancement of Management, Wilmington	1
District of Columbia:	
American University, Washington, D. C	3
District of Columbia Public Schools, Washington, D. C. (held in cooperation with distributive education)	2
Florida:	
Lively Technical School, Tallahassee (held in cooperation with distributive education)	1
University of Florida, Jacksonville, Tampa, Orlando	4
Georgia:	
University of Georgia, Rome Center, Rome	1
Waycross Vocational School, Waycross, Alma	2
Idaho: Boise Junior College, Boise	2
Illinois:	
Bradley University, Peoria	1
De Paul University, Chicago	1
Illinois Institute of Technology, Chicago	2
Loyola University, Chicago	8
Northwestern University, Chicago	4
University of Southern Illinois, Benton, Carbondale, East St. Louis, Highland, Mount Vernon	6
Indiana:	
Ball State Teachers College, Muncie	2
Butler University, Indianapolis	1
Iowa:	
Drake University, Des Moines	2
St. Ambrose College, Davenport	1
Kansas:	
Kansas Office of Education, Atchison, Everest (in cooperation with distributive education)	2
University of Wichita, Wichita	3
Wichita Opportunity School, Wichita (in cooperation with distributive education)	1
Maryland:	
University of Baltimore, Baltimore	6
University of Maryland, College Park, Baltimore, Frederick	6
Massachusetts:	
American International College, Springfield	2
Boston University, Boston	10
Clark University, Worcester	5
Springfield College, Springfield	1
Michigan:	
University of Michigan, Grand Rapids	1
Wayne University, Detroit	6
Minnesota:	
University of Minnesota, Minneapolis, Duluth	6
Moorhead State College, Moorhead	2
Mississippi: University of Mississippi, University	1
Missouri:	
Missouri State Department of Education, Branson (in cooperation with distributive education)	1
University of Kansas City, Kansas City	2
Society for Advancement of Management, Kansas City	5
Nebraska: University of Omaha, Omaha	1
Nevada: Las Vegas High School, Las Vegas (in cooperation with Distributive Education)	1
New Hampshire: University of New Hampshire, Manchester	3

New Jersey:	
Fairleigh-Dickinson University, Teaneck	1
Rutgers University, Newark, New Brunswick	6
New Mexico: University of New Mexico, Albuquerque	1
New York:	
Adelphi College, Garden City	7
Broadway School, Newburgh (in cooperation with Distributive Education)	1
University of Buffalo, Buffalo	1
Fordham University, New York	1
Hofstra College, Hempstead	3
New York University, New York	6
Russell Sage College, Hudson, Cobleskill, Hoosick Falls, Waterford	4
Syracuse University, Syracuse	2
North Carolina:	
Asheville City Schools, Asheville*	1
Carver College, Charlotte*	1
Charlotte College, Charlotte	2
Fayetteville High School, Fayetteville*	1
Gastonia Technical School, Gastonia*	1
Hickory High School, Hickory*	1
Jacksonville High School, Jacksonville*	1
Kannapolis High School, Kannapolis*	1
New Bern High School, New Bern*	1
Rockingham High School, Rockingham*	1
Rocky Mount City Schools, Rock Mount*	1
Wake Forest College, Winston-Salem	2
Walter Williams High School, Burlington*	1
Waynesville City Schools, Waynesville*	1
Wilmington College, Wilmington*	2
Ohio:	
Bowling Green State University, Bowling Green	2
University of Toledo, Toledo	1
Western Reserve University, Cleveland	3
Wooster College, Wooster	1
Oklahoma:	
Cushing High School, Cushing*	1
University of Oklahoma, Anadarko, Ardmore, Blackwell, Clinton, Duncan, Enid, Guymon, Lawton, Lindsay, Midwest City, Muskogee, Norman, Ponca City, Shawnee*	17
University of Oklahoma City, Kingfisher, Oklahoma City	9
University of Tulsa, Tulsa	6
Oregon:	
Lewis and Clark College, Portland	1
Oregon State College, Corvallis	1
Portland Extension Center, Oregon State Board of Higher Education, Portland*	3
Pennsylvania:	
Lehigh University, Bethlehem	3
Pennsylvania Military College, Chester	1
Scranton University, Scranton	4
Temple University, Philadelphia	5
Rhode Island: Brown University, Providence	3
South Carolina:	
Edmonds High School, Sumter*	1
University of South Carolina, Columbia*	2
South Dakota:	
Augustana College, Sioux Falls	1
South Dakota School of Mines and Technology, Rapid City	1
Tennessee: University of Tennessee, Knoxville	2
Texas:	
Fort Worth Retail Institute, Fort Worth*	3
Retail Institute of Dallas, Dallas*	1
Texas Christian University, Forth Worth	1
Texas Western College, El Paso	1
Trinity University, San Antonio	1

Virginia:	
Albemarle High School, Charlottesville*	1
Appomattox Public Schools, Appomattox*	1
Big Stone Gap School, Big Stone Gap*	1
Blacksburg High School, Blacksburg*	1
Broadway High School, Harrisonburg*	1
Clintwood High School, Clintwood*	1
Covington High School, Covington*	1
Danville Public Schools, Danville*	2
E. C. Glass High School, Lynchburg*	1
Graham High School, Bluefield*	1
George Wythe High School, Wytheville*	1
James Monroe High School, Fredericksburg*	1
James Wood High School, Winchester*	1
Loudoun County High School, Leesburg*	1
Luray High School, Luray*	1
Marion High School, Marion*	1
Martinsville High School, Martinsville*	1
Mount Vernon High School, Alexandria*	2
Newport News High School, Newport News*	2
Norfolk City Schools, Norfolk*	1
Pennington High School, Pennington*	1
Richmond Public Schools, Richmond*	11
University of Richmond, Richmond	6
Robert E. Lee High School, Staunton*	1
Virginia State College, Petersburg	1
Virginia Union University, Richmond*	1
Waynesboro High School, Waynesboro*	1
William and Mary College, Norfolk	1
Woodrow Wilson High School, Portsmouth*	2
Woodstock High School, Woodstock*	1
Washington:	
Edison Technical School, Seattle*	17
University of Washington, Seattle	5
Washington State College, Spokane	3
Yakima Valley Junior College, Yakima	1
West Virginia:	
Davis and Elkins College, Elkins	1
Morris Harvey College, Charleston	2
Potomac State College, Keyser	1
Salem College, Salem	1
University of West Virginia, Clarksburg	1
Wisconsin:	
School of Vocational and Adult Education, Sheboygan*	1
Marquette University, Milwaukee	3
University of Wisconsin, Milwaukee	10
Wisconsin State College, Stevens Point	1
Wisconsin State College, Superior	1
Wyoming: Casper Junior College, Casper	1
Territory of Hawaii: University of Hawaii, Honolulu, Kahului	3
Puerto Rico:	
Distributive education program, Bayamon, Fajardo, Caguas	3
Catholic University of Puerto Rico, Ponce	2
College of Agriculture and Mechanical Arts, Mayaguez	1
Inter-American University, San German	1
University of Puerto Rico, Rio Piedras	4

*Held in cooperation with Distributive Education.

CIVIL SERVICE COMMISSION

Report of United States Civil Service Commission on WOC Employees

Section 710 of the Defense Production Act authorizes the President to employ persons of outstanding experience and ability without compensation to the extent that he deems necessary and appropriate in order to carry out the provisions of the act. The act provides that the President shall be guided in the exercise of the authority by policies set forth in the act. Subsection 710 (b) (7) of the Defense Production Act further provides as follows:

"At least once every three months the Chairman of the United States Civil Service Commission shall survey appointments made under this subsection and shall report to the President and the Joint Committee on Defense Production and make such recommendations as he may deem proper."

The following report of the Chairman of the United States Civil Service Commission covers the period from July 1, 1958, to September 30, 1958:

Report of Survey Under Paragraph 710 (b) (7) of the Defense Production Act and Section 305 (a) of Executive Order 10647

INTRODUCTION

This survey covers appointments under the authority of subsections 710 (b) and 710 (c) of the Defense Production Act, as amended by Public Law 295, and Executive Order 10647 for the period July 1, 1958, through September 30, 1958. It is submitted in compliance with those parts of the law and the Executive order which require the Chairman of the United States Civil Service Commission to survey such appointments at least once every 3 months and report his findings to the President and to the Joint Committee on Defense Production.

The report consists of (*a*) a statistical summary of w. o. c.'s on the rolls or appointed during the period; (*b*) a statistical summary of the paid consultants or experts on the rolls or appointed during the period; and (*c*) a narrative statement covering the findings in each of the departments or agencies covered by the survey.

The total number of w. o. c. employees on the rolls of all agencies decreased from 129 on June 30, 1958, to 127 on September 30, 1958. Although seven appointments are shown for the Department of the Army, these do not represent new additions since all such appointments in that Department terminate at close of business, June 30. These seven appointments represent the reappointment of w. o. c. consultants who were previously on the rolls.

Five agencies having authority to make appointments under this law and Executive order made no appointments and have no consultants or experts on their rolls under this authority.

The number of w. a. e. consultants and experts decreased by 5, there having been 103 on the rolls as of June 30, 1958, as against 98 on September 30, 1958. Here again, the number appointed is misleading since the 12 appointments made by the Department of the Army represent reappointments of experts previously on the rolls whose appointments automatically terminated on June 30, 1958.

The current survey disclosed compliance on the part of all agencies except in one case. The irregularity in this instance related to the filing of a statement of financial change by a consultant employed in the Office of Civil and Defense Mobilization. More detail regarding this case will be found in the narrative statement covering that Office.

There had been no change in any of the departments and agencies covered in existing instructions relating to the employment of consultants and experts.

I. Statistical summary—Appointees without compensation

Agency	W.O.C.'s on rolls, July 1, 1958	W.O.C.'s appointed July 1 to Sept. 30, 1958	W.O.C.'s separated July 1 to Sept. 30, 1958	W.O.C.'s on rolls, Sept. 30, 1958	Number in advisory positions	Number in other than advisory positions
Commerce Department	84	9	7	86	78	8
Office of Civil and Defense Mobilization	29	2	2	29	28	1
Interior Department	0	0	0	0	0	0
Defense Department:						
Office of Secretary	0	0	0	0	0	0
Army Department	[1] 0	7	0	7	7	0
Air Force Department	2	0	0	2	2	0
Navy Department	0	0	0	0	0	0
General Services Administration	0	0	0	0	0	0
Interstate Commerce Commission	3	0	0	3	3	0
Labor Department	0	0	0	0	0	0
Total	118	18	9	127	118	9

[1] The appointments of the 11 employees shown on the last survey expired on June 30, 1958.

II. Statistical summary—Consultants and experts, w. a. e. (not to exceed $50 per day)

Agency	W. a. e.'s on rolls July 1, 1958	W. a. e.'s appointed July 1 to Sept. 30, 1958	W. a. e.'s separated July 1 to Sept. 30, 1958	Total W. a. e.'s on rolls as of Sept. 30, 1958
Commerce Department	9	0	0	9
Office of Civil Defense Mobilization	68	1	4	65
Interior Department	4	0	0	4
Defense Department:				
Office of Secretary	0	0	0	0
Army Department	[1] 0	12	0	12
Navy Department	0	0	0	0
General Services Administration	5	1	1	5
Interstate Commerce Commission	3	0	0	3
Labor Department	0	0	0	0
Total	89	14	5	98

[1] The appointments of the 14 employees shown on the last survey expired on June 30, 1958.

SUMMARY BY AGENCIES

Commerce

On July 1, 1958, the Department of Commerce had 84 appointees on its rolls under section 710 (b) of the Defense Production Act and section 101 (a) of Executive Order 10647. During the quarter covered by this survey there were 9 new appointments and 7 separations leaving a total of 86 employed under the above provisions on September 30, 1958. Of these, 78 were found to be serving in advisory positions while 8 consultants were serving in positions having operating responsibilities. This is a decrease of two since the previous survey who are serving in other than advisory capacities.

A complete review was made of the cases of the nine new appointees. All of these were found to fully meet the provisions of the law and the Executive order. The certifications required by section 301 (a) of the Executive order together with the supporting statements required by section 301 (b) were in the files and were complete in each instance.

On July 1, 1958, the Department of Commerce had nine appointees on its rolls under the authority of section 710 (c) of the Defense Production Act. In the quarter covered by this survey there were no appointments or separations.

Office of Civil and Defense Mobilization

On July 1, 1958, the Office of Civil and Defense Mobilization had 29 appointees on its rolls under section 710 (b) of the Defense Production Act and section 101 (a) of Executive Order 10647. Between July 1 and September 30, 1958, there were 2 new appointments and 2 separations so that as of September 30 there had been no net change in the total number employed.

A complete review of the files in the cases of the two new appointees indicated that all requirements of the law and the Executive order had been met.

Twenty-eight of the consultants employed under these authorities were found to be in advisory positions. One position having operating responsibilities continues to be filled by an appointee serving under section 101 (a) of the Executive order.

In determining whether all consultants had filed the statement of financial change required under section 302 (c), it was found that such a statement had not been published for Mr. L. Gordon Walker. Personnel representatives of the agency were under the impression that Mr. Walker had been separated from the rolls. A check of the records indicated otherwise. The agency is now taking steps to get the required statement filed. Compliance will be determined at the time of the next survey.

At the beginning of this quarter, the Office of Civil and Defense Mobilization had 68 appointees on its rolls under section 101 (b) of the Executive order. During the quarter there was 1 appointment and 4 separations leaving a total of 65. The new appointees are well-qualified and properly serving in a consultant position.

Interior

The Department of the Interior had no w. o. c. employees on its rolls under the authorities of the Defense Production Act and Executive Order 10647.

The Department had four consultants on its rolls on July 1, 1958, under the provisions of section 710 (c) of the Defense Production Act and section 101 (b) of Executive Order 10647. There were no appointments or separations during the period covered by this report.

Department of Defense

Office of the Secretary.—The Office of the Secretary of Defense made no appointments and had no employees on its rolls under any of the authorities of the Defense Production Act or Executive Order 10647.

Army.—As indicated in the introduction to this report, the Department of the Army separated all of its w. o. c. consultants as of the close of business, June 30, 1958. During the first 2 weeks of the new quarter beginning July 1, 1958, the Army reappointed 7 w. o. c. consultants. All of the 7 had been on the rolls as of June 30, 1958. There were no other appointments or separations during the period covered by this survey. The files covering the reappointment of these 7 consultants were reviewed with a finding that all of the requirements of the Defense Production Act and the Executive order had been met. The required financial statements had been filed with the Federal Register Division within prescribed time limits.

As of the close of business June 30, 1958, the Department of the Army separated the 14 consultants carried on its rolls under the provisions of subsection 710 (c) of the Defense Production Act. During the first 30 days of the quarter beginning July 1, 1958, 12 of the consultants who had previously been on the rolls were reappointed. There were no appointments aside from these nor were there any separations during the 3 months' period covered by this survey. A complete review was made of the files of the 12 appointees all of whom were found to be well qualified and properly serving in consultant positions.

Air Force.—On July 1, 1958, the Air Force had two w. o. c. consultants on its rolls. No new appointments or separations occurred during the quarter. Revised financial statements under the provisions of section 302 (c) had been filed with the Federal Register in all required cases.

The Department of the Air Force had no consultants or experts on its rolls under the provisions of subsection 710 (c) of the Defense Production Act.

Navy.—The Department of the Navy had no appointees on its rolls under any provisions of the Defense Production Act or Executive Order 10647 during this quarter.

General Services Administration

The General Services Administration had no employees on its rolls under the authority of section 710 (b) of the Defense Production Act and section 101 (a) of Executive Order 10647.

On July 1, 1958, the General Services Administration had five w. a. e. consultants and experts on its rolls under the provision of subsection 710 (c) of the Defense Production Act. During this quarter one consultant was appointed and one separated resulting in no net change in the total number carried.

A review of the record in the case of the new appointee resulted in a finding that he was qualified and properly serving in a consultant position.

Interstate Commerce Commission

On July 1, 1958, the Interstate Commerce Commission had three w. o. c. consultants on its rolls under section 710 (b) of the Defense Production Act and section 101 (a) of Executive Order 10647. There were no appointments or separations during this quarter. The provisions of section 302 (c) relating to the filing of financial statements had been met in all required cases.

The Interstate Commerce Commission had three w. a. e. consultants on its rolls under the authority of subsection 710 (c) of the Defense Production Act. There were no appointments or separations during the quarter.

Labor

The Department of Labor had no employees on its rolls under any provisions of the Defense Production Act or Executive Order 10647 during the period covered by this survey.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, December 12, 1958.

Hon. A. WILLIS ROBERTSON,
Chairman, Joint Committee on Defense Production,
United States Senate, Washington, D. C.

DEAR SENATOR ROBERTSON: In response to your request there is attached for inclusion in the annual committee report on defense production a proposed section covering defense mobilization activities in the Department of Health, Education, and Welfare for the period ending November 1, 1958.

By reporting at this time, I am able to include information concerning proposed new delegations to this Department by the Office of Civil and Defense Mobilization, details of which are now being worked out in conferences between the two agencies.

The attached report has been discussed informally by members of my staff with the committee staff and is presumed to be of appropriate length for your purpose. If further information is desired, Mr. Dean Snyder, defense coordinator in my Office, will gladly arrange to supply it.

Sincerely yours,

ARTHUR E. FLEMMING, *Secretary.*

REPORT ON DEFENSE MOBILIZATION ACTIVITIES DURING 1958

The Department of Health, Education, and Welfare has been active in civil defense and mobilization planning activities pursuant to Executive Order 10346, the Federal Civil Defense Act of 1950, and directives and instructions from the Office of Defense Mobilization (now OCDM). Currently these activities are being stepped up under provisions of the National Plan for Civil Defense and Defense Mobilization (released in October 1958) and Reorganization Plan No. 1 of 1958 which combined FCDA and ODM into a single agency in the Executive Office of the President.

Following World War II, the Public Health Service and other operating agencies of the Department were asked by the Department of Defense and the National Security Resources Board to furnish technical advice and assistance in civil-defense planning. When the Federal Civil Defense Act was passed in January 1951, this Department responded to further requests for assistance, including the loan of professional and technical personnel from the Public Health Service.

FCDA DELEGATIONS

Subsequently, in July 1954 the Department received a formal delegation of civil defense responsibilities from FCDA. This delegation assigned the following responsibilities:

Plan a national program, develop technical guidance for States, and direct Federal activities concerned with financial assistance for the temporary relief or aid of civilians injured or in want as the result of attack.

Plan, program, and develop technical guidance for the States and direct Federal activities concerned with the acquisition, transportation, and payment for clothing of civilians in want as a result of attack.

Plan a national program, develop technical guidance for States, and direct Federal civil-defense activities concerned with research with respect to, and detection, identification, and control of: (1) Communicable diseases in humans, (2) biological warfare against humans, (3) chemical warfare against humans, and (4) other public-health hazards.

Plan, develop, and direct Federal activities concerned with a national program designed to provide Public Health Service reserve professional personnel from support areas to those damaged by enemy attack.

Plan, develop, and distribute through appropriate channels, training materials for incorporation in the curricula of schools and colleges throughout the United States in order to integrate the teaching, in all possible courses, of civil-defense skills, and knowledge and fundamentals of behavior during emergencies.

Plan, develop, and distribute, through appropriate channels, technical guidance concerning the provision of shelter and other protective measures, designed to minimize injury to personnel and reduce damage to vital functional components of educational institutions and hospitals and of water, sewer, and other public-health facilities.

Plan a national program, develop technical guidance for States and direct Federal activities concerned with the emergency restoration of community facilities essential to health or functional components thereof for which the Public Health Service normally has regular operating programs.

Plan a national program, conduct research, develop technical guidance for States, and direct Federal activities designed to meet the extraordinary needs for food and drug inspection and control in attacked areas.

One million dollars was initially appropriated by Congress to inaugurate these delegated activities in fiscal year 1955. An additional $1,240,000 was appropriated for fiscal year 1956 and $2,340,000 for fiscal year 1957, for a total of $4,580,000. The distribution of these funds over a 3-year period provided approximately two-thirds, or $3,016,700, to the Public Health Service, with considerably lesser amounts for the delegated activities of the Food and Drug Administration, Social Security Administration, and Office of Education.

PUBLIC HEALTH SERVICE

Under the 1954 delegation the Public Health Service provided consultation to State and local public health agencies in the development of emergency health plans, as well as on problems of sanitation in mass evacuation of cities, maintenance of safe water supplies, insect and rodent control, decontamination measures, and biological and chemical warfare defense techniques. In the 3-year period 1954–57, during which funds were available, PHS recruited over 2,100 physicians, sanitary engineers, and associated professional personnel in the Inactive Reserve Corps and trained many of these in the special techniques required in civil defense. An additional 4,000 persons engaged in public health work in State and local health departments participated in civil defense training courses. These and other training programs under the FCDA delegation were designed to develop competence on the part of State and local health personnel in biological, chemical, radiological, and communicable disease defense measures. The Public Health Service also undertook a number of research projects designed to arrive at answers to problems involved in protecting people against new and dangerous hazards of modern warfare.

FOOD AND DRUG ADMINISTRATION

The Food and Drug Administration under its delegation conducted important research into the effects of atomic explosions upon food and drugs, and upon the types of containers in which food is stored.

The FDA also initiated a research program designed to develop basic information for dealing with biological warfare attacks as concerns the food and drug supply.

Training courses were conducted in all of the FDA field districts to acquaint all professional employees with the problems of protecting national food and drug supplies in case of enemy attack involving chemical, biological, and/or radiological weapons. Similar courses were conducted in 47 of the States where the training was given to more than 2,000 State and local food and drug enforcement officials, other Federal and State government employees, and some representatives from the regulated industries. In accordance with one of the principal recommendations of the Civilian Defense Foods Advisory Committee of the National Academy of Sciences-National Research Council, this training course was enlarged to include the frozen and canned food segments of the food industry as the first step in reaching all food processors.

A training and reference manual, "Civil Defense Information for Food and Drug Officials," based on the findings of the FDA, was prepared and widely distributed nationally. This manual is now in its second printing.

SOCIAL SECURITY ADMINISTRATION

The Social Security Administration developed a national plan for the administration of emergency financial assistance and provision of emergency clothing for individuals in need in the event of a disaster. The Bureau of Public Assistance (SSA), in charge of this program, prepared operating manuals for use by the State welfare agencies through which these programs would be carried out. The Social Security Administration developed a working agreement plan of operation and concluded such agreements with 44 States and Territories. Under these agreements the States agreed to act as agents of the Federal agency and to carry out emergency activities under a unified operating plan. Field staffs of the Bureau of Public Assistance were located in strategic regional offices to assist the States in undertaking these plans.

The Children's Bureau (SSA) assigned staffs to work with State civil defense agencies in the development of instructional material dealing with the emergency care of expectant mothers in the event of an evacuation. The Bureau of Old-Age and Survivors Insurance (SSA) developed emergency plans for the payment of old-age and survivors benefits under emergency conditions.

OFFICE OF EDUCATION

The Office of Education established pilot centers in three States for the purpose of developing training material for school curriculum use on civil defense survival measures. The product of the pilot center studies was incorporated into a handbook entitled "Education for National Survival" which has been widely distributed to schools throughout the United States.

SUSPENSION OF DELEGATED ACTIVITY IN 1957

Program activities under the FCDA delegation were at their peak in June 1957 when funds for this purpose were discontinued. As a result most of the delegated activities, since they were not part of the normal budget of the Department, had to be placed in suspension or conducted on a minimum basis where this could be done in connection with regular work.

In spite of this curtailment, the Department has attempted to carry on other mobilization planning essential to its own continuity of functions in an emergency. Departmental staff has participated regularly in Operation Alert activities; departmental relocation sites and emergency communication facilities have been developed. Procedures to decentralize emergency operating responsibilities to the regions have been prepared and tested. These functions of planning and coordination are headed in the Office of an Assistant Secretary and in a defense planning committee with members representing each operating agency.

MOBILIZATION ACTIVITIES IN 1958

NATIONAL INVENTORY OF SURVIVAL MEDICAL ITEMS

In 1957 an Interagency Committee on Survival Items, under the leadership of ODM, developed a comprehensive list of items considered absolutely essential for the survival of the population during a postattack period. Task force

groups covering health supplies and equipment; food; body protection and household operation; light, power, and fuels; sanitation and water supply, and emergency housing and lodging, developed lists within their several areas of responsibility. The Public Health Service actively participated in these task force groups, providing professional and technical advice.

Based on the survival item list, the Public Health Service assumed the responsibility of determining national inventories of medical survival items located at about 60,000 wholesale, institutional, and retail points. Concurrently, the Business Defense Services Administration of the Department of Commerce launched a study of producer and producer-distribution point inventories. In September 1958, the PHS submitted a preliminary report to OCDM for use in calculating medical stockpile needs based on estimated remaining postattack inventories. A final report will be submitted in January 1959.

CIVILIAN REQUIREMENTS, POSTATTACK

Since "requirements" are fundamental to any determinations related to stockpiling, the Public Health Service established two advisory committees by direction of the Surgeon General. One committee, composed of PHS physicians, undertook the responsibility of determining first year postattack per capita noncasualty civilian requirements for all items on the health supplies and equipment survival list. These noncasualty requirements figures, along with casualty requirements developed by OCDM, provide an estimated grand total of national needs during the first year following an all-out attack on this country. The health supplies and equipment requirements report was submitted to OCDM in September 1958.

The other committee, composed of PHS sanitary engineers, has developed total casualty and noncasualty per capita civilian requirements for sanitation and water supply survival items. This report has been completed and will be submitted to OCDM in December 1958.

ALTERNATIVES TO STOCKPILING

The Public Health Service is presently cooperating with OCDM to determine the feasibility of creating inventory reserves of medical survival items at wholesale distribution points as a means to augment Federal stockpiling. If feasible, a procedure will be developed for rotation of perishable items. It is also proposed to establish about 1,000 distribution points for essential medical supplies during the early postattack period.

SURVEY OF WATER SUPPLIES

The Public Health Service has continued the work of inventorying potable water supply sources in the United States and in making this information available to the National Damage Assessment Center. They have also collaborated with the Joint Committee on Chlorine Supply in a survey of available chlorine stocks located at city waterworks facilities to determine the adequacy of such supplies to meet emergency conditions.

NATIONAL PLAN FOR CIVIL DEFENSE

The Department of Health, Education, and Welfare has participated with other Federal agencies in the development, under OCDM direction, of the National Plan for Civil Defense and Defense Mobilization. Assignments have recently been made to the Public Health Service to write annexes for a National Medical and Health Plan, and a National Water Plan and to participate in writing the annex for a National Biological and Chemical Warfare Defense Plan. The Social Security Administration is also participating with OCDM in preparing the annex for a mass care and assistance program.

DISTRIBUTION OF RADIOLOGICAL INSTRUMENTS TO SCHOOLS

The Office of Education has assisted OCDM in developing a program for the distribution of radiological monitoring equipment to schools through State departments of education and to selected colleges and universities. Lack of funds in 1958 has prevented further activity in the development of additional curriculum material on civil defense survival actions, although many requests for such material continue to be received from State and local school systems.

EMERGENCY FINANCIAL ASSISTANCE AND EMERGENCY CLOTHING

Although no funds have been made available since 1957 for the continuation of this program, the Bureau of Public Assistance (SSA) is maintaining contacts with the State welfare departments through the regular Bureau regional staff. The Bureau has continued limited activity in planning for emergency organization and operations during a disaster. This includes preparation of materials for protection of essential records, delegations to the field, lines of succession, self-triggering regulations and guidelines for implementation of field delegations.

The Social Security Administration has attempted to keep in touch with new developments in areas of survival planning although its delegated program is now maintained in "caretaker" status pending appropriation of funds. Emergency functions for the overall social security program have been revised in the light of the potential effect of an attack upon the Nation's economy. An SSA civil defense planning committee has been maintained in active status.

SURPLUS PROPERTY UTILIZATION FOR CIVIL DEFENSE

The development and administration of a program for the donation of Federal surplus personal property to State and local civil defense organizations, authorized by an amendment to Public Law 655, was given to the Department of Health, Education, and Welfare, under FCDA Delegation No. 5 on September 1, 1956. Under this program the DHEW Surplus Property Utilization Division, with specialized personnel in each regional office, is carrying on an active program of screening Federal surplus stocks and making useful items available to civil defense authorities.

OTHER MOBILIZATION ACTIVITIES

During 1958, the Department of Health, Education, and Welfare has continued to develop plans for the conduct of noninterruptible functions from its assigned relocation site. This activity has involved further refinement of individual agency operating plans, preparation of standby orders to regional offices, to become effective in event of attack, designation of staff to proceed to relocation sites, and the testing of parts of such emergency plans during the annual Operation Alert exercise.

PROPOSED DELEGATIONS UNDER REORGANIZATION PLAN NO. 1 OF 1958

With the consolidation of FCDA and ODM under provisions of Reorganization Plan No. 1 of 1958, the successor Office of Civil and Defense Mobilization has proposed that DHEW accept broader responsibility for the conduct of appropriate activities, such as emergency health and welfare, under the National Plan for Civil Defense and Defense Mobilization. It is anticipated that these assignments will be made by Executive order early in 1959.

The delegations being discussed go considerably beyond the scope of previous FCDA delegations. It is proposed that the Department undertake to develop a program of emergency health services, including casualty care, throughout the United States. This would also include development of a plan to insure adequate supplies of potable water in an emergency; a program for stockpiling medical survival items; research activities related to the prevention, detection, and rapid identification of biological and chemical warefare agents; expanded recruitment of trained professional health personnel for the PHS Inactive Reserve Corps; and a program of guidance and technical assistance to health personnel at State and local levels designed to make maximum use of available civilian health resources in an emergency.

In addition to these delegations in the health field, it is proposed that the Social Security Administration of the Department develop a national program of welfare services, including community survival services, and a program of emergency financial assistance for those in need. Also the Office of Education would further develop and test curriculum training materials in civil defense knowledge and skills for use by schools and colleges.

These typical activities, as well as others under consideration, if delegated and appropriately financed, will project the Department of Health, Education, and Welfare, into civil and defense mobilization research, operational, and training activities to a much greater degree than in any previous period.

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List of Executive orders issued under the authority of the Defense Production Act of 1950, as amended, in whole or in part, to Nov. 1, 1958 (Reorganization Plan No. 1 of 1958 included)

Executive Order No.	Title of order	Date of order	Federal Register citation	Date of Federal Register
10160	Providing for the preservation of records for certain purposes of the Defense Production Act of 1950.	Sept. 9, 1950	15 F. R. 6103	Sept. 12, 1950
10161	Delegating certain functions of the President under the Defense Production Act of 1950.	do	15 F. R. 6105	do
10182	Providing for the appointment of certain persons under the Defense Production Act of 1950, and prescribing regulations for their exemption from certain conflict-of-interest statutes.	Nov. 21, 1950	15 F. R. 8013	Nov. 23, 1950
10193	Providing for the conduct of the mobilization effort of the Government.	Dec. 16, 1950	15 F. R. 9031	Dec. 19, 1950
10200	Establishing the Defense Production Administration.	Jan. 3, 1951	16 F. R. 61	Jan. 4, 1951
10205	Amending Executive Order No. 10182 relating to the appointment of certain persons under the Defense Production Act of 1950.	Jan. 16, 1951	16 F. R. 419	Jan. 17, 1951
10219	Defining certain responsibilities of Federal agencies with respect to transportation and storage.	Feb. 28, 1951	16 F. R. 1983	Mar. 2, 1951
10223	Further providing for the performance of certain functions under the Defense Production Act of 1950.	Mar. 10, 1951	16 F. R. 2247	Mar. 13, 1951
10224	Establishing the National Advisory Board on Mobilization Policy.	Mar. 15, 1951	16 F. R. 2543	Mar. 20, 1951
10233	Amending Executive Order No. 10161 with respect to wage stabilization and settlement of labor disputes .	Apr. 21, 1951	16 F. R. 3503	Apr. 24, 1951
10281	Defense materials procurement and supply.	Aug. 28, 1951	16 F. R. 8789	Aug. 30, 1951
10301	Amending Executive Order No. 10161, as amended, to provide for alternate members of the Wage Stabilization Board.	Nov. 2, 1951	16 F. R. 11257	Nov. 6, 1951
10308	Improving the means for obtaining compliance with the nondiscrimination provisions of Federal contracts.	Dec. 3, 1951	16 F. R. 12303	Dec. 6, 1951
10323	Transferring certain functions and delegating certain powers to the Small Defense Plants Administration.	Feb. 5, 1952	17 F. R. 1145	Feb. 6, 1952
10324	Amending Executive Order No. 10161 of Sept. 9, 1950, with respect to the definitions of "solid fuels" and "domestic transportation, storage, and port facilities."	Feb. 6, 1952	17 F. R. 1171	Feb. 7, 1952
10359	Amending Executive Order No. 10161, as amended, with respect to certain plant fibers.	June 9, 1952	17 F. R. 5269	June 11, 1952
10370	Delegating certain authority of the President to the Small Defense Plants Administrator.	July 7, 1952	17 F. R. 6141	July 9, 1952
10373	Amending Executive Order No. 10161 with respect to real-estate credit.	July 14, 1952	17 F. R. 6425	July 16, 1952
10377	Providing for the composition of the Wage Stabilization Board.	July 25, 1952	17 F. R. 6891	July 29, 1952
10390	Amending Executive Order No. 10161 of Sept. 9, 1950, as amended, to provide for certain alternate members of the Wage Stabilization Board.	Aug. 30, 1952	17 F. R. 7995	Sept. 4, 1952

Executive Order No.	Title of order	Date of order	Federal Register citation	Date of Federal Register
10433	Further providing for the administration of the Defense Production Act of 1950, as amended.	Feb. 4, 1953	18 F. R. 761	Feb. 6, 1953
10434	Suspension of wage and salary controls under the Defense Production Act of 1950, as amended.	Feb. 6, 1953	18 F. R. 809	Feb. 10, 1953
10461	Delegating and transferring certain functions and affairs to the Office of Defense Mobilization provided for in Reorganization Plan No. 3 of 1953.	June 17, 1953	18 F. R. 3513	June 19, 1953
10467	Further providing for the administration of the Defense Production Act of 1950, as amended.	June 30, 1953	18 F. R. 3777	July 2, 1953
10480	Further providing for the administration of the defense mobilization program.	Aug. 14, 1953	18 F. R. 4939	Aug. 20, 1953
10489	Providing for the administration of certain loan and guaranty functions under the Defense Production Act of 1950, as amended.	Sept. 26, 1953	18 F. R. 6201	Sept. 29, 1953
10493	Delegating certain functions of the President to the Administrator of the Small Business Administration.	Oct. 14, 1953	18 F. R. 6583	Oct. 16, 1953
10494	Disposition of functions remaining under title IV of the Defense Production Act.	do	18 F. R. 6585	do
10504	Transferring certain functions, powers, and duties to the Small Business Administration.	Dec. 1, 1953	18 F. R. 7767	Dec. 3, 1953
10537	Amending Executive Orders Nos. 10219 and 10480 with respect to the designation of a Commissioner of the Interstate Commerce Commission to perform certain functions.	June 22, 1954	19 F. R. 3807	June 22, 1954
10574	Amendment of Executive Order No. 10480 providing for the administration of the defense mobilization program.	Nov. 5, 1954	19 F. R. 7249	Nov. 9, 1954
10634	Providing for loans to aid in the reconstruction, rehabilitation, and replacement of facilities which are destroyed or damaged by a major disaster and which are required for national defense.	Aug. 25, 1955	20 F. R. 6433	Sept. 1, 1955
10647	Providing for the appointment of certain persons under the Defense Production Act of 1950, as amended.	Nov. 28, 1955	20 F. R. 8769	Nov. 30, 1955
10660	Providing for the establishment of a National Defense Executive Reserve.	Feb. 15, 1956	21 F. R. 1117	Feb. 18, 1956
10662	Amendment of Executive Order No. 10480 and revocation of Executive Order No. 10160, relating to the administration of the Defense Production Act of 1950.	Mar. 13, 1956	21 F. R. 1673	Mar. 16, 1956
Reorganization Plan No. 1 of 1958.	Establishment in Executive Office of the President the Office of Defense and Civilian Mobilization, Transfer of Civil Defense Advisory Council to Office of Defense and Civilian Mobilization, representatives on National Security Council (submitted pursuant to the Reorganization Act of 1949, approved June 20, 1949, as amended, 63 Stat. 206, 5 U. S. C. 133z-9).	June 30, 1958	23 F. R. 4991	July 1, 1958
10773	Transfer of functions from Office of Defense Mobilization and Federal Civil Defense Administration, assignments and delegations to Director of Office of Defense and Civilian Mobilization, establishment of Defense and Civilian Mobilization Board.	July 1, 1958	23 F. R. 5061	July 3, 1958
10782	Change of name from Office of Defense and Civilian Mobilization to Office of Civil and Defense Mobilization consonant with the act of Aug. 26, 1958 (72 Stat. 861).	Sept. 6, 1958	23 F. R. 6971	Sept. 10, 1958

THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED[1]

AN ACT To establish a system of priorities and allocations for materials and facilities, authorize the requisitioning thereof, provide financial assistance for expansion of productive capacity and supply, provide for price and wage stabilization, provide for the settlement of labor disputes, strengthen controls over credit, and by these measures facilitate the production of goods and services necessary for the national security, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act, divided into titles, may be cited as "the Defense Production Act of 1950."

TABLE OF CONTENTS

Title I. Priorities and allocations.
Title II. Authority to requisition.[2]
Title III. Expansion of productive capacity and supply.
Title IV. Price and wage stabilization.[2]
Title V. Settlement of labor disputes.[2]
Title VI. Control of consumer and real estate credit.[2]
Title VII. General provisions.

DECLARATION OF POLICY

SEC. 2. In view of the present international situation and in order to provide for the national defense and national security, our mobilization effort continues to require some diversion of certain materials and facilities from civilian use to military and related purposes. It also requires the development of preparedness programs and the expansion of productive capacity and supply beyond the levels needed to meet the civilian demand, in order to reduce the time required for full mobilization in the event of an attack on the United States.

In order to insure productive capacity in the event of such an attack on the United States, it is the policy of the Congress to encourage the geographical dispersal of the industrial facilities of the United States in the interest of the national defense, and to discourage the concentration of such productive facilities within limited geographical areas which are valuable to attack by an enemy of the United States. In the construction of any Government-owned industrial facilities, in the rendition of any Government financial assistance for the construction, expansion, or improvement of any industrial facilities, and in the procurement of goods and services, under this or any other Act, each department and agency of the Executive Branch shall apply, under the coordination of the Office of Defense Mobilization, when practicable and consistent with existing law and the desirability for maintaining a sound economy, the principle of the geographical dispersal of such facilities in the interest of national defense. Nothing contained in this paragraph shall preclude the use of existing industrial facilities.

TITLE I—PRIORITIES AND ALLOCATION

SEC. 101. (a) The President is hereby authorized (1) to require that performance under contracts or orders (other than contracts of employment) which he deems necessary or appropriate to promote the national defense shall take priority over performance under any other contract or order, and for the purpose of assuring such priority, to require acceptance and performance of

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[1] Public Law 774, 81 Cong. September 8, 1950, ch. 932, 64 Stat. 798, 50 U. S. C. App. 2061–2166; Public Law 69, 82d Cong., June 30, 1951, ch. 198; Public Law 96, 82d Cong., July 31, 1951, ch. 275, 65 Stat. 134, 50 U. S. C. App. 2061–2166; Public Law 429, 82d Cong., June 30, 1952, ch. 530, 66 Stat. 296, 50 U. S. C. App. 2061–2166; Public Law 95, 83d Cong., June 30, 1953, ch. 171; Public Law 119, 84th Cong., June 30, 1955, ch. 251; Public Law 295, 84th Cong., August 9, 1955, ch. 655, 69 Stat. 580, 50 U. S. C. App. 2061–2166 (effective as of the close of July 31, 1955); Public Law 632, 84th Cong., June 29, 1956, ch. 474, 70 Stat. 408, 50 U. S. C. App. 2061–2166 (1956 amendment to sec. 712 (e) effective July 1, 1956); Public Law 85–471, 85th Cong., June 28, 1958, 72 Stat. 241, 50 U. S. C. App. 2061–2166 (a).

[2] Terminated June 30, 1953.

[3] Terminated April 30, 1953.

such contracts or orders in preference to other contracts or orders by any person he finds to be capable of their performance, and (2) to allocate materials and facilities in such manner, upon such conditions, and to such extent as he shall deem necessary or appropriate to promote the national defense.

(b) The powers granted in this section shall not be used to control the general distribution of any material in the civilian market unless the President finds (1) that such material is a scarce and critical material essential to the national defense, and (2) that the requirements of the national defense for such material cannot otherwise be met without creating a significant dislocation of the normal distribution of such material in the civilian market to such a degree as to create appreciable hardship.

SEC. 102. In order to prevent hoarding, no person shall accumulate (1) in excess of the reasonable demands of business, personal, or home consumption, or (2) for the purpose of resale at prices in excess of prevailing market prices, materials which have been designated by the President as scarce materials or materials the supply of which would be threatened by such accumulation. The President shall order published in the Federal Register, and in such other manner as he may deem appropriate, every designation of materials the accumulation of which is unlawful and any withdrawal of such designation. In making such designations the President may prescribe such conditions with respect to the accumulation of materials in excess of the reasonable demands of business, personal, or home consumption as he deems necessary to carry out the objectives of this Act. This section shall not be construed to limit the authority contained in sections 101 and 704 of this Act.

SEC. 103. Any person who willfully performs any act prohibited, or willfully fails to perform any act required, by the provisions of this title or any rule, regulation, or order thereunder, shall, upon conviction, be fined not more than $10,000 or imprisoned for not more than one year, or both.

SEC. 104. IMPORT CONTROLS. Terminated at the close of June 30, 1953, by section 11, 1953, amendments.

TITLE II—AUTHORITY TO REQUISITION AND CONDEMN

Terminated at the close of June 30, 1953, by section 11, 1953, amendments.

TITLE III—EXPANSION OF PRODUCTIVE CAPACITY AND SUPPLY

SEC. 301. (a) In order to expedite production and deliveries or services under Government contracts, the President may authorize, subject to such regulations as he may prescribe, the Department of the Army, the Department of the Navy, the Department of the Air Force, the Department of Commerce, and such other agencies of the United States engaged in procurement for the national defense as he may designate (hereinafter referred to as "guaranteeing agencies"), without regard to provisions of law relating to the making, performance, amendment, or modification of contracts, to guarantee in whole or in part any public or private financing institution (including any Federal Reserve bank), by commitment to purchase, agreement to share losses, or otherwise, against loss of principal or interest on any loan, discount, or advance, or on any commitment in connection therewith, which may be made by such financing institution for the purpose of financing any contractor, subcontractor, or other person in connection with the performance of any contract or other operation deemed by the guaranteeing agency to be necessary to expedite production and deliveries or services under Government contracts for the procurement of materials or the performance of services for the national defense, or for the purpose of financing any contractor, subcontractor, or other person in connection with or in contemplation of the termination, in the interest of the United States, of any contract made for the national defense; but no small-business concern (as defined in section 714 (a) (1) of this Act) shall be held ineligible for the issuance of such a guaranty by reason of alternative sources of supply.

(b) Any Federal agency or any Federal Reserve bank, when designated by the President, is hereby authorized to act, on behalf of any guaranteeing agency, as fiscal agent of the United States in the making of such contracts of guarantee and in otherwise carrying out the purposes of this section. All such funds as may be necessary to enable any such fiscal agent to carry out any guarantee made by it on behalf of any guaranteeing agency shall be supplied and disbursed by or under authority from such guaranteeing agency. No such fiscal agent shall have any responsibility or accountability except as agent in taking any action pursuant to or under authority of the provisions of this section. Each such fiscal agent

shall be reimbursed by each guaranteeing agency for all expenses and losses incurred by such fiscal agent in acting as agent on behalf of such guaranteeing agency, including among such expenses, notwithstanding any other provision of law, attorneys' fees and expenses of litigation.

(c) All actions and operations of such fiscal agents under authority of or pursuant to this section shall be subject to the supervision of the President, and to such regulations as he may prescribe; and the President is authorized to prescribe, either specifically or by maximum limits or otherwise, rates of interest, guarantee and commitment fees, and other charges which may be made in connection with loans, discounts, advances, or commitments guaranteed by the guaranteeing agencies through such fiscal agents, and to prescribe regulations governing the forms and procedures (which shall be uniform to the extent practicable) to be utilized in connection with such guarantees.

(d) Each guaranteeing agency is hereby authorized to use for the purposes of this section any funds which have heretofore been appropriated or allocated or which hereafter may be appropriated or allocated to it, or which are or may become available to it, for such purposes or for the purpose of meeting the necessities of the national defense.

SEC. 302. To expedite production and deliveries or services to aid in carrying out Government contracts for the procurement of materials or the performance of services for the national defense, the President may make provision for loans (including participations, or guarantees of, loans) to private business enterprises (including research corporations not organized for profit) for the expansion of capacity, the development of technological processes, or the production of essential materials, including the exploration, development, and mining of strategic and critical metals and minerals, and manufacture of newsprint. Such loans may be made without regard to the limitations of existing law and on such terms and conditions as the President deems necessary, except that financial assistance may be extended only to the extent that it is not otherwise available on reasonable terms.

SEC. 303. (a) To assist in carrying out the objectives of this Act, the President may make provision (1) for purchases of or commitments to purchase metals, minerals, and other materials, for Government use or resale; and (2) for the encouragement of exploration, development, and mining of critical and strategic minerals and metals: *Provided, however,* That purchases for resale under this subsection shall not include that part of the supply of an agricultural commodity which is domestically produced except insofar as such domestically produced supply may be purchased for resale for industrial uses or stockpiling, and no commodity purchased under this subsection shall be sold at less than the established ceiling price for such commodity (except that minerals and metals shall not be sold at less than the established ceiling price, or the current domestic market price, whichever is lower), or, if no ceiling price has been established, the higher of the following: (i) The current domestic market price for such commodity, or (ii) the minimum sale price established for agricultural commodities owned or controlled by the Commodity Credit Corporation as provided in section 407 of Public Law 439, 81st Congress: *Provided further, however,* That no purchase or commitment to purchase any imported agricultural commodity shall be made calling for delivery more than one year after the expiration of this act.

(b) Subject to the limitations in subsection (a), purchases and commitments to purchase and sales under such subsection may be made without regard to the limitations of existing law, for such quantities, and on such terms and conditions, including advance payments, and for such periods, but not extending beyond June 30, 1965, as the President deems necessary, except that purchases or commitments to purchase involving higher than established ceiling prices (or if there be no established ceiling prices, currently prevailing market prices) or anticipated loss on resale shall not be made unless it is determined that supply of the materials could not be effectively increased at lower prices or on terms more favorable to the Government, or that such purchases are necessary to assure the availability to the United States of overseas supplies.

(c) If the President finds—

(1) that under generally fair and equitable ceiling prices for any raw or nonprocessed material, there will result a decrease in supplies from high-cost sources of such material, and that the continuation of such supplies is necessary to carry out the objectives of the act; or

(2) that an increase in cost of transportation is temporary in character and threatens to impair maximum production or supply in any area at stable prices of any materials,

he may make provision for subsidy payments on any such domestically produced material other than an agricultural commodity in such amounts and in such manner (including purchases of such material and its resale at a loss without regard to the limitations of existing law), and on such terms and conditions, as he determines to be necessary to insure that supplies from such high-cost sources are continued, or that maximum production or supply in such area at stable prices of such materials is maintained, as the case may be.

(d) The procurement power granted to the President by this section shall include the power to transport and store and have processed and refined, any materials procured under this section.

(e) When in his judgment it will aid the national defense, the President is authorized to install additional equipment, facilities, processes, or improvements to plants, factories, and other industrial facilities owned by the United States Government, and to install Government owned equipment in plants, factories, and other industrial facilities owned by private persons.

(f) Notwithstanding any other provision of law to the contrary, metals, minerals, and materials acquired pursuant to the provisions of this section which, in the judgment of the President, are excess to the needs of programs under this act, shall be transferred to the national stockpile established pursuant to the act of June 7, 1939, as amended (50 U. S. C. 98–98h), when the President deems such action to be in the public interest.

Transfers made pursuant to this subsection shall be made without charge against or reimbursement from funds available under such act of June 7, 1939, as amended, except that costs incident to such transfer other than acquisition costs shall be paid or reimbursed from such funds, and the acquisition costs of such metals, minerals, and materials transferred shall be deemed to be net losses incurred by the transferring agency and the notes payable issued to the Secretary of the Treasury representing the amounts thereof shall be canceled. Upon the cancellation of any such notes the aggregate amount of borrowing which may be outstanding at any one time under section 304 (b) of this act, as amended, shall be reduced in an amount equal to the amount of any notes so canceled.

(g) When in his judgment it will aid the national defense, and upon a certification by the Secretary of Agriculture or the Secretary of the Interior that a particular strategic and critical material is likely to be in short supply in time of war or other national emergency, the President may make provision for the development of substitutes for such strategic and critical materials.

SEC. 304. (a) For the purposes of sections 302 and 303, the President is hereby authorized to utilize such existing departments, agencies, officials, or corporations of the Government as he may deem appropriate, or to create new agencies (other than corporations).

(b) Any agency created under this section, and any department, agency, official, or corporation utilized pursuant to this section is authorized, subject to the approval of the President, to borrow from the Treasury of the United States, such sums of money as may be necessary to carry out its functions under sections 302 and 303: *Provided*, That the amount borrowed under the provisions of this section by all such borrowers shall not exceed an aggregate of $2,100,000,000 outstanding at any one time: *Provided further*, That when any contract, agreement, loan, or other transaction heretofore or hereafter entered into pursuant to section 302 or 303 imposes contingent liability upon the United States, such liability shall be considered for the purposes of section 3679 and 3732 of the Revised Statutes, as amended, as an obligation only to the extent of the probable ultimate net cost to the United States under such transaction; and the President shall submit a report to the Congress not less often than once each quarter setting forth the gross amount of each such transaction entered into by any agency of the United States Government under this authority and the basis for determining the probable ultimate net cost to the United States thereunder. For the purpose of borrowing as authorized by this subsection, the borrower may issue to the Secretary of the Treasury its notes, debentures, bonds, or other obligations to be redeemable at its option before maturity in such manner as may be stipulated in such obligations. Such obligations shall bear interest at a rate determined by the Secretary of the Treasury, taking into consideration the current average rate on outstanding marketable obligations of the United States as of the last day of the month preceding the issuance of the obligations. The Secretary of the Treasury is authorized and directed to purchase such obligations and for such purpose the Secretary

of the Treasury is authorized to use as a public-debt transaction the proceeds from the sale of any securities issued under the Second Liberty Bond Act, as amended, and the purposes for which securities may be issued under the Second Liberty Bond Act, as amended, are extended to include any purchases of obligations hereunder.

TITLE IV—PRICE AND WAGE STABILIZATION

Terminated at the close of April 30, 1953, by section 11, 1953 amendments.

TITLE V—SETTLEMENT OF LABOR DISPUTES

Terminated at the close of April 30, 1953, by section 11, 1953 amendments.

TITLE VI—CONTROL OF REAL ESTATE CREDIT

Terminated at the close of June 30, 1953, by section 11, 1953 amendments.

TITLE VII—GENERAL PROVISIONS

SEC. 701. (a) It is the sense of the Congress that small-business enterprises be encouraged to make the greatest possible contribution toward achieving the objectives of this Act.

(b) In order to carry out this policy—

(i) the President shall provide small-business enterprises with full information concerning the provisions of this Act relating to, or of benefit to, such enterprises and concerning the activities of the various departments and agencies under this Act;

(ii) such business advisory committees shall be appointed as shall be appropriate for purposes of consultation in the formulation of rules, regulations, or orders, or amendments thereto issued under authority of this Act, and in their formation there shall be fair representation for independent small, for medium, and for large business enterprises, for different geographical areas, for trade association members and nonmembers, and for different segments of the industry;

(iii) in administering this Act, such exemptions shall be provided for small-business enterprises as may be feasible without impeding the accomplishment of the objectives of this Act; and

(iv) in administering this Act, special provision shall be made for the expeditious handling of all requests, applications, or appeals from small-business enterprises.

(c) Whenever the President invokes the powers given him in this Act to allocate any material in the civilian market, he shall do so in such a manner as to make available, so far as practicable, for business and various segments thereof in the normal channel of distribution of such material, a fair share of the available civilian supply based, so far as practicable, on the share received by such business under normal conditions during a representative period preceding any future allocation of materials: *Provided*, That the President shall, in the allocation of materials in the civilian market, give due consideration to the needs of new concerns and newly acquired operations, undue hardships of individual businesses, and the needs of smaller concerns in an industry.

(d) In order to further the objectives and purposes of this section, the Office of Defense Mobilization is directed to investigate the distribution of defense contracts with particular reference to the share of such contracts which has gone and is now going to small business, either directly or by subcontract; to review the policies, procedures, and administrative arrangements now being followed in order to increase participation by small business in the mobilization program; to explore all practical ways, whether by amendments to laws, policies, regulations, or administrative arrangements, or otherwise, to increase the share of defense procurement going to small business; to get from the departments and agencies engaged in procurement, and from other appropriate agencies including the Small Business Administration, their views and recommendations on ways to increase the share of procurements going to small business; and to make a report to the President and the Congress, not later than six months after the enactment of the Defense Production Act Amendments of 1955, which report shall contain the following: (i) a full statement of the steps taken by the Office of Defense Mobilization in making investigations required by this subsection; (ii) the findings of the Office of Defense Mobilization with respect to the share of procurement which has gone and is now going to small business; (iii) a full and

complete statement of the actions taken by the Office of Defense Mobilization and other agencies to increase such small business share; (iv) a full and complete statement of the recommendations made by the procurement agencies and other agencies consulted by the Office of Defense Mobilization; and (v) specific recommendations by the Office of Defense Mobilization for further action to increase the share of procurement going to small business.

SEC. 702. As used in this Act—

(a) The word "person" includes an individual, corporation, parnership, association, or any other organized group of persons, or legal successor or representative of the foregoing, and includes the United States or any agency thereof, or any other government, or any of its political subdivisions, or any agency of any of the foregoing: *Provided*, That no punishment provided by this Act shall apply to the United States, or to any such government, political subdivision, or government agency.

(b) The word "materials" shall include raw materials, articles, commodities, products, supplies, components, technical information, and processes.

(c) The word "facilities" shall not include farms, churches or other places of worship, or private dwelling houses.

(d) The term, "national defense" means programs for military and atomic energy production or construction, military assistance to any foreign nation, stockpiling, and directly related activity.

(e) The words "wages, salaries, and other compensation" shall include all forms of remuneration to employees by their employers for personal services, including, but not limited to, vacation and holiday payments, night shift and other bonuses, incentive payments, year-end bonuses, employer contributions to or payments of insurance or welfare benefits, employer contributions to a pension fund or annuity, payments in kind, and premium overtime payments.

SEC. 703. (a) Except as otherwise specifically provided, the President may delegate any power or authority conferred upon him by this Act to any officer or agency of the Government, including any new agency or agencies (and the President is hereby authorized to create such new agencies, other than corporate agencies, as he deems necessary), and he may authorize such redelegations by that officer or agency as the President may deem appropriate. The President is authorized to appoint heads and assistant heads of any such new agencies, and other officials therein of comparable status, and to fix their compensation, without regard to the Classification Act of 1949, as amended, the head of one such agency to be paid at a rate comparable to the compensation paid to the heads of executive departments of the Government, and other such heads, assistant heads, and officials at rates comparable to the compensation paid to the heads and assistant heads of independent agencies of the Government. Any officer or agency may employ civilian personnel for duty in the United States, including the District of Columbia, or elsewhere, without regard to section 14 of the Federal Employees Pay Act of 1946 (60 Stat. 219) as the President deems necessary to carry out the provisions of this Act.

(b) The head and assistant heads of any independent agency created to administer the authority conferred by title IV of this Act shall be appointed by the President, by and with the advice and consent of the Senate. There shall be included among the policymaking officers of each regional office administering the authority conferred by title IV of this Act a resident of each State served by such office whose governor requests such representation.

SEC. 704. The President may make such rules, regulations, and orders as he deems necessary or appropriate to carry out the provisions of this Act. Any regulation or order under this Act may be established in such form and manner, may contain such classifications and differentiations, and may provide for such adjustments and reasonable exceptions as in the judgment of the President are necessary or proper to effectuate the purposes of this Act, or to prevent circumvention or evasion, or to facilitate enforcement of this Act, or any rule, regulation, or order issued under this Act. No rule, regulation, or order issued under this Act which restricts the use of natural gas (either directly, or by restricting the use of facilities for the consumption of natural gas, or in any other manner) shall apply in any State in which a public regulatory agency has authority to restrict the use of natural gas and certifies to the President that it is exercising that authority to the extent necessary to accomplish the objectives of this Act.

SEC. 705. (a) The President shall be entitled, while this Act is in effect and for a period of two years thereafter, by regulation, subpena, or otherwise, to obtain such information from, require such reports and the keeping of such records by, make such inspection of the books, records, and other writings, premises

or property of, and take the sworn testimony of, and administer oaths and affirmations to, any person as may be necessary or appropriate, in his discretion, to the enforcement or the administration of this Act and the regulations or orders issued thereunder. The President shall issue regulations insuring that the authority of this subsection will be utilized only after the scope and purpose of the investigation, inspection, or inquiry to be made have been defined by competent authority, and it is assured that no adequate and authoritative data are available from any Federal or other responsible agency. In case of contumacy by, or refusal to obey a subpena served upon, any person referred to in this subsection, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the President, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, or both; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(b) No person shall be excused from complying with any requirement under this section or from attending and testifying or from producing books, papers, documents, and other evidence in obedience to a subpena before any grand jury or in any court or administrative proceeding based upon or growing out of any alleged violation of this Act on the ground that the testimony or evidence, documentary or otherwise, required of him may tend to incriminate him or subject him to penalty or forfeiture; but no natural person shall be prosecuted or subjected to any penalty or forfeiture in any court, for or on account of any transaction, matter, or thing concerning which he is so compelled, after having claimed his privilege against self-incrimination, to testify or produce evidence, documentary or otherwise, except that such natural person so testifying shall not be exempt from prosecution and punishment for perjury committed in so testifying: *Provided*, That the immunity granted herein from prosecution and punishment and from any penalty or forfeiture shall not be construed to vest in any individual any right to priorities assistance, to the allocation of materials, or to any other benefit which is within the power of the President to grant under any provision of this Act.

(c) The production of a person's books, records, or other documentary evidence shall not be required at any place other than the place where such person usually keeps them, if prior to the return date specified in the regulations, subpena, or other document issued with respect thereto, such person furnishes the President with a true copy of such books, records, or other documentary evidence (certified by such person under oath to be a true and correct copy) or enters into a stipulation with the President as to the information contained in such books, records, or other documentary evidence. Witnesses shall be paid the same fees and mileage that are paid witnesses in the courts of the United States.

(d) Any person who willfully performs any act prohibited or willfully fails to perform any act required by the above provisions of this section, or any rule, regulation, or order thereunder, shall upon conviction be fined not more than $1,000 or imprisoned for not more than one year or both.

(e) Information obtained under this section which the President deems confidential or with reference to which a request for confidential treatment is made by the person furnishing such information shall not be published or disclosed unless the President determines that the withholding thereof is contrary to the interest of the national defense, and any person willfully violating this provision shall, upon conviction, be fined not more that $10,000, or imprisoned for not more than one year, or both.

All information obtained by the Office of Price Stabilization under this section 705, as amended, and not made public prior to April 30, 1953, shall be deemed confidential and shall not be published or disclosed, either to the public or to another Federal agency except the Congress or any duly authorized committee thereof, and except the Department of Justice for such use as it may deem necessary in the performance of its functions, unless the President determines that the withholding thereof is contrary to the interests of the national defense, and any person willfully violating this provision shall, upon conviction, be fined not more than $10,000 or imprisoned for not more than one year, or both.

(f) Any person subpenaed under this section shall have the right to make a record of his testimony and to be represented by counsel.

SEC. 706. (a) Whenever in the judgment of the President any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this Act, he may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the President

that such person has engaged or is about to engage in any such acts or practices a permanent or temporary injunction, restraining order, or other order, with or without such injunction or restraining order, shall be granted without bond.

(b) The district courts of the United States and the United States courts of any Territory or other place subject to the jurisdiction of the United States shall have jurisdiction of violations of this Act or any rule, regulation, order, or subpena thereunder, and of all civil actions under this Act to enforce any liability or duty created by, or to enjoin any violation of, this Act or any rule, regulation, order, or subpena thereunder. Any criminal proceeding on account of any such violation may be brought in any district in which any act, failure to act, or transaction constituting the violation occurred. Any such civil action may be brought in any such district or in the district in which the defendant resides or transacts business. Process in such cases, criminal or civil, may be served in any district wherein the defendant resides or transacts business or wherever the defendant may be found; the subpena for witnesses who are required to attend a court in any district in such case may run into any other district. The termination of the authority granted in any title or section of this Act, or of any rule, regulation, or order issued thereunder, shall not operate to defeat any suit, action, or prosecution, whether theretofore or thereafter commenced, with respect to any right, liability, or offense incurred or committed prior to the termination date of such title or of such rule, regulation, or order. No costs shall be assessed against the United States in any proceeding under this Act. All litigation arising under this Act or the regulations promulgated thereunder shall be under the supervision and control of the Attorney General.

SEC. 707. No person shall be held liable for damages or penalties for any act or failure to act resulting directly or indirectly from compliance with a rule, regulation, or order issued pursuant to this Act notwithstanding that any such rule, regulation, or order shall thereafter be declared by judicial or other competent authority to be invalid. No person shall discriminate against orders or contracts to which priority is assigned or for which materials or facilities are allocated under title I of this Act or under any rule, regulation, or order issued thereunder, by charging higher prices or by imposing different terms and conditions for such orders or contracts than for other generally comparable orders or contracts, or in any other manner.

SEC. 708. (a) The President is authorized to consult with representatives of industry, business, financing, agriculture, labor, and other interests, with a view to encouraging the making by such persons with the approval by the President of voluntary agreements and programs to further the objectives of this Act.

(b) No act or omission to act pursuant to this Act which occurs while this Act is in effect, if requested by the President pursuant to a voluntary agreement or program approved under subsection (a) and found by the President to be in the public interest as contributing to the national defense shall be construed to be within the prohibition of the antitrust laws or the Federal Trade Commission Act of the United States: "*Provided, however*, That after the enactment of the Defense Production Act Amendments of 1955, the exemption from the prohibitions of the antitrust laws and the Federal Trade Commission Act of the United States shall apply only (1) to acts and omissions to act requested by the President or his duly authorized delegate pursuant to duly approved voluntary agreements or programs relating solely to the exchange between actual or prospective contractors of technical or other information, production techniques, and patents or patent rights, relating to equipment used primarily by or for the military which is being procured by the Department of Defense or any department thereof, and the exchange of materials, equipment, and personnel to be used in the production of such equipment; and (2) to acts and omissions to act requested by the President or his duly authorized delegate pursuant to voluntary agreements or programs which were duly approved under this section before the enactment of the Defense Production Act Amendments of 1955. The Attorney General shall review each of the voluntary agreements and programs covered by this section, and the activities being carried on thereunder, and, if he finds, after such review and after consultation with the Director of the Office of Defense Mobilization and other interested agencies, that the adverse effects of any such agreement or program on the competitive free-enterprise system outweigh the benefits of the agreement or program to the national defense, he shall withdraw his approval in accordance with subsection (d) of this section. This review and determination shall be made within ninety days after the enactment of the Defense Production Act Amendments of 1955.

A copy of each such request intended to be within the coverage of this section, and any modification or withdrawal thereof, shall be furnished to the Attorney General and the Chairman of the Federal Trade Commission when made, and it shall be published in the Federal Register unless publication thereof would, in the opinion of the President, endanger the national security.

(c) The authority granted in subsection (b) shall be delegated only (1) to officials who shall for the purpose of such delegation be required to be appointed by the President by and with the advice and consent of the Senate, unless otherwise required to be so appointed, and (2) upon the condition that such officials consult with the Attorney General and with the Chairman of the Federal Trade Commission not less than ten days before making any request or finding thereunder, and (3) upon the condition that such officials obtain the approval of the Attorney General to any request thereunder before making the request. For the purpose of carrying out the objectives of title I of this Act, the authority granted in subsection (b) of this section shall not be delegated except to a single official of the Government.

(d) Upon withdrawal of any request or finding made hereunder, or upon withdrawal by the Attorney General of his approval of the voluntary agreement or program on which the request or finding is based, the provisions of this section shall not apply to any subsequent act or omission to act by reason of such finding or request.

(e) The Attorney General is directed to make, or request the Federal Trade Commission to make for him, surveys for the purpose of determining any factors which may tend to eliminate competition, create or strengthen monopolies, injure small business, or otherwise promote undue concentration of economic power in the course of the administration of this Act. Such surveys, and the reports hereafter required, shall include studies of the voluntary agreements and programs authorized by this section. The Attorney General shall submit to the Congress and the President within ninety days after the approval of this Act, and at least once every three months, reports setting forth the results of such surveys and including such recommendations as he may deem desirable.

(f) After the date of enactment of the Defense Production Act Amendments of 1952, no voluntary program or agreement for the control of credits shall be approved or carried out under this section.

SEC. 709. The functions exercised under this Act shall be excluded from the operation of the Administrative Procedure Act (60 Stat. 237) except as to the requirements of section 3 thereof. Any rule, regulation, or order, or amendment thereto, issued under authority of this Act shall be accompanied by a statement that in the formulation thereof there has been consultation with industry representatives, including trade association representatives, and that consideration has been given to their recommendations, or that special circumstances have rendered such consultation impracticable or contrary to the interest of the national defense, but no such rule, regulation, or order shall be invalid by reason of any subsequent finding by judicial or other authority that such a statement is inaccurate.

SEC. 710. (a) Repealed by section 505 (c) (1) of the Act of June 28, 1955 (69 Stat. 180).

(b) (1) The President is further authorized, to the extent he deems it necessary and appropriate in order to carry out the provisions of this Act, and subject to such regulations as he may issue, to employ persons of outstanding experience and ability without compensation;

(2) The President shall be guided in the exercise of the authority provided in this subsection by the following policies:

(i) So far as possible, operations under the Act shall be carried on by full-time, salaried employees of the Government, and appointments under this authority shall be to advisory or consultative positions only.

(ii) Appointments to positions other than advisory or consultative may be made under this authority only when the requirements of the position are such that the incumbent must personally possess outstanding experience and ability not obtainable on a full-time, salaried basis.

(iii) In the appointment of personnel and in assignment of their duties, the head of the department or agency involved shall take steps to avoid, to as great an extent as possible, any conflict between the governmental duties and the private interests of such personnel.

(3) Appointees under this subsection (b) shall, when policy matters are involved, be limited to advising appropriate full-time salaried Government officials who are responsible for making policy decisions.

(4) Any person employed under this subsection (b) is hereby exempted, with respect to such employment, from the operation of sections 281, 283, 284, 434, and 1914 of title 18, United States Code, and section 190 of the Revised Statutes (5 U. S. C. 99), except that—

(i) exemption hereunder shall not extend to the negotiation or execution, by such appointee, of Government contracts with the private employer of such appointee or with any corporation, joint stock company, association, firm, partnership, or other entity in the pecuniary profits or contracts of which the appointee has any direct or indirect interest;

(ii) exemption hereunder shall not extend to making any recommendation or taking any action with respect to individual applications to the Government for relief or assistance, on appeal or otherwise, made by the private employer of the appointee or by any corporation, joint stock company, association, firm, partnership, or other entity in the pecuniary profits or contracts of which the appointee has any direct or indirect interest;

(iii) exemption hereunder shall not extend to the prosecution by the appointee, or participation by the appointee in any fashion in the prosecution, of any claims against the Government involving any matter concerning which the appointee had any responsibility during his employment under this subsection, during the period of such employment and the further period of two years after the termination of such employment; and

(iv) exemption hereunder shall not extend to the receipt or payment of salary in connection with the appointee's Government service hereunder from any source other than the private employer of the appointee at the time of his appointment hereunder.

(5) Appointments under this subsection (b) shall be supported by written certification by the head of the employing department or agency—

(i) that the appointment is necessary and appropriate in order to carry out the provisions of the Act;

(ii) that the duties of the position to which the appointment is being made require outstanding experience and ability;

(iii) that the appointee has the outstanding experience and ability required by the position; and

(iv) that the department or agency head has been unable to obtain a person with the qualifications necessary for the position on a full-time, salaried basis.

(6) The heads of the departments or agencies making appointments under this subsection (b) shall file with the Division of the Federal Register for publication in the Federal Register a statement including the name of the appointee, the employing department or agency, the title of his position, and the name of his private employer, and the appointee shall file with such Division for publication in the Federal Register a statement listing the names of any corporations of which he is an officer or director or within 60 days preceding his appointment has been an officer or director, or in which he owns, or within 60 days preceding his appointment has owned, any stocks, bonds, or other financial interests, and the names of any partnerships in which he is, or was within 60 days preceding his appointment, a partner, and the names of any other businesses in which he owns, or within such 60-day period has owned, any similar interest. At the end of each succeeding 6-month period, the appointee shall file with such Division for publication in the Federal Register a statement shownig any changes in such interests during such period.

(7) At least once every 3 months the Chairman of the United States Civil Service Commission shall survey appointments made under this subsection and shall report his findings to the President and the Joint Committee on Defense Production and make such recommendations as he may deem proper.

(8) Persons appointed under the authority of this subsection may be allowed transportation and not to exceed $15 per diem in lieu of subsistence while away from their homes or regular places of business pursuant to such appointment.

(c) The President is authorized, to the extent he deems it necessary and appropriate in order to carry out the provisions of this Act, to employ experts and consultants or organizations thereof, as authorized by section 55a of title 5 of the United States Code. Individuals so employed may be compensated at rates not in excess of $50 per diem and while away from their homes or regular places of business they may be allowed transportation and not to exceed $15 per diem in lieu of subsistence and other expenses while so employed. The President is authorized to provide by regulation for the exemption of such persons from the operation of sections 281, 283, 284, 434, and 1914 of title 18 of the United States Code and section 190 of the Revised Statutes (5 U. S. C. 99).

(d) The President may utilize the services of Federal, State, and local agencies and may utilize and establish such regional, local, or other agencies, and utilize such voluntary and uncompensated services, as may from time to time be needed; and he is authorized to provide by regulation for the exemption of persons whose services are utilized under this subsection from the operation of sections 281, 283, 284, 434, and 1914 of title 18 of the United States Code and section 190 of the Revised Statutes (5 U. S. C. 99).

(e) The President is further authorized to provide for the establishment and training of a nucleus executive reserve for employment in executive positions in Government during periods of emergency. Members of this executive reserve who are not full-time Government employees may be allowed transportation and not to exceed $15 per diem in lieu of subsistence while away from their homes or regular places of business for the purpose of participating in the executive reserve training program. The President is authorized to provide by regulation for the exemption of such persons who are not full-time Government employees from the operation of sections 281, 283, 284, 434, and 1914 of title 18 of the United States Code and section 190 of the Revised Statutes (5 U. S. C. 99).

(f) Whoever, being an officer or employee of the United States or any department or agency thereof (including any Member of the Senate or House of Representatives), receives, by virtue of his office or employment, confidential information, and (1) uses such information in speculating directly or indirectly on any commodity exchange, or (2) discloses such information for the purpose of aiding any other person so to speculate, shall be fined not more than $10,000 or imprisoned not more than one year, or both. As used in this section, the term "speculate" shall not include a legitimate hedging transaction, or a purchase or sale which is accompanied by actual delivery of the commodity.

(g) The President, when he deems such action necessary, may make provision for the printing and distribution of reports, in such number and in such manner as he deems appropriate, concerning the actions taken to carry out the objectives of this Act.

SEC. 711. There are hereby authorized to be appropriated such sums as may be necessary and appropriate for the carrying out of the provisions and purposes of this Act by the President and such agencies as he may designate or create. Funds made available for the purposes of this Act may be allocated or transferred for any of the purposes of this Act, with the approval of the Bureau of the Budget, to any agency designated to assist in carrying out this Act. Funds so allocated or transferred shall remain available for such period as may be specified in the Acts making such funds available.

SEC. 712. (a) There is hereby established a joint congressional committee to be known as the Joint Committee on Defense Production (hereinafter referred to as the committee), to be composed of ten members as follows:

(1) Five members who are members of the Committee on Banking and Currency of the Senate, three from the majority and two from the minority party, to be appointed by the chairman of the committee; and

(2) Five members who are members of the Committee on Banking and Currency of the House of Representatives, three from the majority and two from the minority party, to be appointed by the chairman of the committee.

A vacancy in the membership of the committee shall be filled in the same manner as the original selection. The committee shall elect a chairman and a vice chairman from among its members, one of whom shall be a Member of the Senate and the other a Member of the House of Representatives.

(b) It shall be the function of the Committee to make a continuous study of the programs and of the fairness to consumers of the prices authorized by this Act and to review the progress achieved in the execution and administration thereof. Upon request, the committee shall aid the standing committees of the Congress having legislative jurisdiction over any part of the programs authorized by this Act; and it shall make a report to the Senate and the House of Representatives, from time to time, concerning the results of its studies, together with such recommendations as it may deem desirable. Any department, official, or agency administering any of such programs shall, at the request of the committee, consult with the committee, from time to time, with respect to their activities under this Act.

(c) The commitee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such times and places, to require by subpena (to be issued under the signature of the chairman or vice chairman of the committee) or otherwise the attendance of such witnesses and the production of

such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 40 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with any subpena or to testify when summoned under authority of this subsection.

(d) The committee is authorized to appoint and, without regard to the Classification Act of 1949, as amended, fix the compensation of such experts, consultants, technicians, and organizations thereof, and clerical and stenographic assistants as it deems necessary and advisable.

(e) The expenses of the committee under this section, which shall not exceed $65,000 in any fiscal year, shall be paid from the contingent fund of the House of Representatives upon vouchers signed by the Chairman or Vice Chairman.

(f) The Secretary of Commerce shall make a special investigation and study of the production, allocation, distribution, use of nickel, of its resale as scrap and of other aspects of the current situation with respect to supply and marketing of nickel, with particular attention to, among other things, the adequacy of the present system of nickel allocation between defense and civilian users. The Secretary of Commerce shall consult with the Joint Committee on Defense Production during the course of such investigation and study with respect to the progress achieved and the results of the investigation and study, and shall make an interim report on the results of the investigation and study on or before August 15, 1956, and shall, on or before December 31, 1956, make a final report on the results of such investigation and study, together with such recommendations as the Secretary of Commerce deems advisable. Such reports shall be made to the Senate (or to the Secretary of the Senate if the Senate is not in session) and to the House of Representatives (or to the Clerk of the House of Representatives if the House is not in session).

SEC. 713. The provisions of this Act shall be applicable to the United States, its Territories and possessions, and the District of Columbia.

SEC. 714. Terminated at the close of July 31, 1953. For purposes of section 301 (a) of this Act, section 714 (a) (1) defined a small-business concern thusly: "* * * a small-business concern shall be deemed to be one which is independently owned and operated and which is not dominant in its field of operation," and provided that, "The Administration, in making a detailed definition, may use these criteria, among others: independency of ownership and operation, number of employees, dollar volume of business, and nondominance in its field."

SEC. 715. If any provision of this Act or the application of such provision to any person or circumstances shall be held invalid, the remainder of the Act, and the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SEC. 716. That no person may be employed under this Act who engages in a strike against the Government of the United States or who is a member of an organization of Government employees that asserts the right to strike against the Government of the United States, or who advocates, or who is a member of an organization that advocates, the overthrow of the Government of the United States by force or violence: *Provided*, That for the purposes hereof an affidavit shall be considered prima facie evidence that the person making the affidavit has not contrary to the provisions of this section engaged in a strike against the Government of the United States, is not a member of an organization of Government employees that asserts the right to strike against the Government of the United States or that such person does not advocate, and is not a member of an organization that advocates, the overthrow of the Government of the United States by force or violence: *Provided further*, That any person who engages in a strike against the Government of the United States or who is a member of an organization of Government employees that asserts the right to strike against the Government of the United States, or who advocates, or who is a member of an organization that advocates, the overthrow of the Government of the United States by force or violence and accepts employment the salary or wages for which are paid from any appropriation or fund contained in this Act shall be guilty of a felony and, upon conviction, shall be fined not more than $1,000 or imprisoned for not more than one year, or both: *Provided further*, That the above penalty clause shall be in addition to, and not in substitution for, any other provisions of existing law.

SEC. 717. (a) Title I (except section 104), title III, and title VII (except section 714) of this Act, and all authority conferred thereunder, shall terminate at the close of June 30, 1960. Section 714 of this Act, and all authority conferred thereunder, shall terminate at the close of July 31, 1953. Section 104, title II, and title VI of this Act, and all authority conferred thereunder shall terminate at the close of June 30, 1953. Title IV and V of this Act, and all authority conferred thereunder, shall terminate at the close of April 30, 1953.

(b) Notwithstanding the foregoing—

(1) The Congress by concurrent resolution or the President by proclamation may terminate this Act prior to the termination otherwise provided therefor.

(2) The Congress may also provide by concurrent resolution that any section of this Act and all authority conferred thereunder shall terminate prior to the termination otherwise provided therefor.

(3) Any agency created under this Act may be continued in existence for purposes of liquidation for not to exceed six months after the termination of the provision authorizing the creation of such agency.

(c) The termination of any section of this Act, or of any agency or corporation utilized under this Act, shall not affect the disbursement of funds under, or the carrying out of, any contract, guarantee, commitment or other obligation entered into pursuant to this Act prior to the date of such termination, or the taking of any action necessary to preserve or protect the interests of the United States in any amounts advanced or paid out in carrying on operations under this Act, or the taking of any action (including the making of new guarantees) deemed by a guaranteeing agency to be necessary to accomplish the orderly liquidation, adjustment, or settlement of any loans guaranteed under this Act, including actions deemed necessary to avoid undue hardship to borrowers in reconverting to normal civilian production; and all of the authority granted to the President, guaranteeing agencies, and fiscal agents, under section 301 of this Act shall be applicable to actions taken pursuant to the authority contained in this subsection.

Notwithstanding any other provision of this Act, the termination of title VI or any section thereof shall not be construed as effecting any obligation, condition, liability, or restriction arising out of any agreement heretofore entered into pursuant to, or under the authority of, section 602 or section 605 of this Act, or any issuance thereunder, by any person or corporation and the Federal Government or any agency thereof relating to the provision of housing for defense workers or military personnel in an area designated as a critical defense housing area pursuant to law.

(d) No action for the recovery of any cooperative payment made to a cooperative association by a Market Administrator under an invalid provision of a milk marketing order issued by the Secretary of Agriculture pursuant to the Agricultural Marketing Agreement Act of 1937 shall be maintained unless such action is brought by producers specifically named as party plaintiffs to recover their respective share of such payments within ninety days after the date of enactment of the Defense Production Act Amendments of 1952 with respect to any cause of action heretofore accrued and not otherwise barred, or within ninety days after accrual with respect to future payments, and unless each claimant shall allege and prove (1) that he objected at the hearing to the provisions of the order under which such payments were made and (2) that he either refused to accept payments computed with such deduction or accepted them under protest to either the Secretary or the Administrator. The district courts of the United States shall have exclusive original jurisdiction of all such actions regardless of the amount involved. This subsection shall not apply to funds held in escrow pursuant to court order. Notwithstanding any other provision of this Act, no termination date shall be applicable to this subsection.

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